

■ 光ファイバ通信入門（改訂4版） 参考文献 ■

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[雑誌の場合]

著者名, “題目”, 雑誌名, Vol.XX, No.YY, pp.Z1-Z2, 月, 年

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著者名, “書籍名”, 発行所, 発行地, 年

- [10HON] von D. Hondros and P. Debye, “Elektromagnetische Wellen an Dielektrischen Drähten”, Annalen der Physik, Vol.32, No.8, p.465, 1910.
- [26SCH] E. Schrödinger, Ann. Phys., Vol.79, p.361, 1926.
- [30LAM] H. Lamb, Z. Instrumentenk, Vol.50, p.579, 1930.
- [34WOO] R. W. Wood, “Physical optics”, 3rd ed., McMillan Pub. Co., New York, 1934.
- [41STR] J. A. Stratton, “Electromagnetic theory”, McGraw-Hill Book Company, Inc., New York, 1941.
- [53NEU] J. von Neumann, “講義録”（復刻版 [87NEU]）
- [54GOR] J. P. Gordon, H. J. Zeiger and C. H. Townes, “Molecular microwave oscillator and new hyperfine structure in the microwave spectrum on NH_3 ”, Phys. Rev., Vol.95, pp.282-284, 1954.
- [55BRA] R. Braunstein, “Radiative transitions in semiconductors”, Phys. Rev., Vol.99, No.9, p.1892, Sept. 1955.
- [55SCH] L. I. Schiff, “Quantum mechanics”, MacGraw-Hill, New York, 1955. (3rd Ed. 1968)
- [57NAM] 難波進, 小川智哉, “ADPの工学への応用 - 電気光学的性質とその応用”, 応用物理, Vol.26, No.10, p.498, Oct. 1957.
- [57NIS] 西澤潤一, 渡辺寧, 日本国特許, 273217, 1957.
- [58SCH] A. L. Schawlow and C. H. Townes, “Infrared and optical masers”, Phys. Rev., Vol.112, p.1940, 1958.
- [59BAS] N. G. Basov, B. M. Vul and Y. M. Popov, “Quantum mechanical semiconductor generators and amplifiers of electromagnetic oscillations”, Zh. Eksperim. Teor. Fiz., Vol.37, p.587, Aug. 1959.
- [59KAP] N. S. Kapany et al., J. Opt. Soc. Am., Vol.49, p.779, 1959.
- [60BAS] N. G. Basov, P. N. Krokhin and Y. M. Popov, “Generation, amplification and detection of infrared and optical radiation by quantum-mechanical systems”, Vsp. Fiz. Nauk, Vol.72, p.161, Oct. 1960.
- [60MAI] T. H. Maiman, “Stimulated optical radiation in ruby”, Nature, Vol.187, pp.493-494, 1960.
- [61BER] M. G. Bernard and G. Duraffourg, “Laser conditions in semiconductors”, Phys. Status Solidi, Vol.1,

- No.6, p.699, July 1961.
- [61FOX] A. G. Fox and T. Li, "Resonant modes in a maser interferometer", Bell Syst. Tech. J., Vol.40, No.3, pp.453-488, Mar. 1961.
 - [61GOU] G. Goubau and F. Scherwing, "On the guided propagation of electromagnetic wave beams", IRE Trans. on Antennas and Propag., Vol.AP-9, No.5, p.248, May 1961.
 - [61JAV] A. Javan, W. R. Bennet, Jr. and D. R. Herriot, "Population inversion and continuous optical maser oscillation in a gas discharge containing a He-Ne mixture", Phys. Rev. Lett., Vol.6, p.106, Feb. 1961.
 - [61KAM] I. P. Kaminow, "Microwave modulation of the electro-optic effect in KH_2PO_4 ", Phys. Rev. Lett., Vol.6, No.10, p.528, May 15, 1961.
 - [61KAP] N. S. Kapany and J. J. Burke, "Fiber optics", J. Opt. Soc. Am., Vol.51, p.1069, 1961.
 - [61MAI] T. H. Maiman, R.H. Hoskins, I. J. D'Haenens, C. K. Asawa and V. Evtunov, "Stimulated optical emission in solids", Phys. Rev., Vol.123, No.4, pp.1151-1157, Aug. 1961.
 - [61NAG] M. Nagasawa, "The adjoint processes of diffusion with reflecting barrier", Kodai Math. Sem. Rep., Vol.13, pp.235-248, 1961.
 - [61SNIa] E. Snitzer and H. Osterberg, "Observed dielectric waveguide modes in the visible spectrum", J. Opt. Soc. Am., Vol.51, No.5, p.499, May 1961.
 - [61SNIb] E. Snitzer, "Cylindrical dielectric waveguide modes", J. Opt. Soc. Am., Vol.51, No.5, pp.491-498, May 1961.
 - [62BLU] R. M. Blumenthal, "Design of a microwave-frequency light modulator", IRE, Vol.50, No.4, p.452, Apr. 1962.
 - [62HAL] R. N. Hall, G. E. Fenner, J. D. Kingsley, T. J. Soltys and R. O. Carlson, "Coherent light emission from GaAs junctions", Phys. Rev. Lett., Vol.9, No.9, p.366, Nov. 1, 1962.
 - [62HAR] S. E. Harris et al., "Modulation and direct demodulation of coherent and incoherent light at a microwave frequency", Appl. Phys. Lett., Vol.1, p.37, 1962.
 - [62HOL] N. Holonyak, Jr. and S. F. Bevacqua, "Coherent (Visible) light emission from Ga ($\text{As}_{1-x}\text{P}_x$) junctions", Appl. Phys. Lett., Vol.1, No.4, p.82, Feb. 1962.
 - [62KEY] R. J. Keyes and T. M. Quist, "Recombination radiation emitted by gallium arsenide", Proc. IRE (Corresp.), Vol.50, p.1822, Aug. 1962.
 - [62NAT] M. I. Nathan, W. P. Dumke, G. Burns, F. H. Dill, Jr. and G. Lasher, "Stimulated emission of radiation from GaAs p-n junctions", Appl. Phys. Lett., Vol.1, No.3, p.62, Nov. 1, 1962.
 - [62QUI] T. M. Quist, R. H. Rediker, R. J. Keyes, W. E. Krag, B. Lax, A. L. McWhorter and J. Zeiger, "Semiconductor maser of GaAs", Appl. Phys. Lett., Vol.1, No.4, p.91, Dec. 1, 1962.
 - [63ALF] Zh. I. Alferov and R. F. Kazarinov, unpublished, cited in [69ALF] .
 - [63BAR] J. Bardeen, "Collected Works of John von Neumann", Vol.5, p.420, Pergamon Press, New York, 1963.
 - [63KRO] H. Kroemer, "A proposed class of hetero-junction injection lasers", Proc. IEEE, Vol.51, No.12, p.1782, Dec. 1963.
 - [63PET] C. J. Peters, "Gigacycle bandwidth coherent light traveling-wave phase modulator", Proc. IEEE, Vol.51, No.1, p.147, Jan. 1963.
 - [63SAI] S. Saito and T. Kimura, "Microwave modulation of ruby laser light using KDP crystals", Jpn. J. Appl. Phys., Vol.2, No.10, p.658, Oct. 1963.
 - [63YAR] A. Yariv and R. C. Leite, "Dielectric waveguide mode of light propagation in p-n junctions", Appl. Phys. Lett., Vol.2, p.55, 1963.

- [64BER] D. W. Berreman, "A lens or light guide using convectively distorted thermal gradients in gases", Bell Syst. Tech. J., Vol.43, No.4, pp.1469-1475, July 1964.
- [64HIR] J. Hirano and Y. Fukatsu, "Stability of a light beam in a beam waveguide", Proc. IEEE, Vol.52, No.11, p.1284, Nov. 1964.
- [64LUN] R. K. Luneburg, "Mathematical theory of optics", UC Berkeley Press, San Francisco, 1964.
- [64MAR] E. A. J. Marcatili, "Modes in sequence of thick astigmatic lens-like focusers", Bell Syst. Tech. J., Vol.43, No.11, p.2887, Nov. 1964.
- [64NEL] D. F. Nelson and F. K. Reinhart, "Light modulation by the electrooptic effect in reverse-biased GaP p-n junction", Appl. Phys. Lett., Vol.5, p.148, 1964.
- [64OST] H. Osterberg and L. W. Smith, "Transmission of optical energy along surfaces : Part I , Inhomogeneous media", J. Opt. Soc. Am., Vol.54, p.1078, 1964.
- [64SUE] Y. Suematsu and K. Iga, "Experiment on quasi-fundamental mode oscillation of ruby laser", Proc. IEEE, Vol.52, No.1, pp.87-88, Jan. 1964.
- [65BIE] G. Biernson and D. J. Kinsley, "Generalized plots of mode patterns in a cylindrical dielectric waveguide applied to retinal cones", IEEE Trans. Microwave Theory & Tech., Vol.MTT-13, No.5, p.345, May 1965.
- [65KAW] S. Kawakami and J. Nishizawa, "Propagation loss in a distributed beam waveguide", Proc. IEEE, Vol.53, No.12, p.2148, Dec. 1965.
- [65KOG] H. Kogelnik, "On the propagation of Gaussian beams of light through lenslike media including those with loss or gain variation", Bell Syst. Tech. J., Vol.44, No.3, pp.455-494, Mar. 1965.
- [65MIL] S. E. Miller, "Light propagation in generalized lens-like media", Bell Syst. Tech. J., Vol.44, No.9, p.2017, Nov. 1965.
- [65SUE] 末松安晴, 吹抜洋司, "理想化されたガス光導波系の解析", 信学誌, Vol.48, No.10, pp.1684-1690, Oct. 1965.
- [65TIE] P. K. Tien, J. P. Gordon and J. R. Winnery, "Focusing of a light beam of Gaussian field distribution in continuous and periodic lens-like media", Proc. IEEE, Vol.53, No.2, p.129, Feb. 1965.
- [65UNG] H. G. Unger, "Light beam propagation in curved schlieren guide", Arch. Elekt. Übertragung, Vol.19, No.4, p.189, Apr. 1965.
- [66ANDa] L. K. Anderson and B. J. McMurtry, "High-speed photodetectors", Proc. IEEE, Vol.54, No.10, p.1355, Oct. 1966.
- [66ANDb] D. B. Anderson and R. R. August, "Applications of microphotolithography to millimeter and infrared devices", Proc. IEEE, Vol.54, No.4, p.657, Apr. 1966.
- [66GOR] G. R. Gordon, "Optics of general guiding media", Bell Syst. Tech. J., Vol.45, No.2, p.321, Feb. 1966.
- [66KAO] K. C. Kao and G. A. Hockham, "Dielectric-fibre surface waveguide for optical frequency", Proc. Inst. Electr. Eng., Vol.113, No.7, p.1151, July 1966.
- [66MCC] D. E. McCumber, "Intensity fluctuations in the output of cw oscillators", Phys. Rev., Vol.141, No.1, pp.306-322, Jan. 1966.
- [66MCI] R. J. McIntyre, "Multiplication noise in uniform avalanche diodes", IEEE Trans. Electron Devices, Vol.ED-13, No.1, p.164, Jan. 1966.
- [66MEL] H. Melchior and W. T. Lynth, "Signal and Noise response of high speed germanium avalanche photo-diode", IEEE Trans. Electron Devices, Vol.ED-13, No.12, pp.829-838, Dec. 1966.
- [66NEL] E. Nelson, Phys. Rev., Vol.150, pp.1079-1085, 1966.
- [66SUEa] Y. Suematsu, K. Iga and S. Ito, "A light beam waveguide using hyperbolic-type gas lenses", IEEE

- Trans. Microwave Theory & Tech., Vol.MTT-14, No.12, pp.657-665, Dec. 1966.
- [66SUEb] 末松安晴, 伊賀健一, “光ビーム導波系における姿態変換”, 信学誌, Vol.49, No.9, pp.1645-1652, Sept. 1966.
- [66SUEc] 末松安晴, 池上徹彦, “半導体レーザの電磁波論的考察”, 信学誌, Vol.49, No.6, pp.1091-1098, June 1966.
- [67AOK] Y. Aoki and M. Suzuki, “Imaging property of a gas lens”, IEEE Trans. Microwave Theory & Tech., Vol.MTT-15, No.1, p.2, Jan. 1967.
- [67DEN] R. T. Denton, F. S. Chen and A. A. Ballman, “Lithium tantalate light modulators”, J. Appl. Phys., Vol.38, No.4, p.1611, Mar. 1967.
- [67DYM] J. C. Dymont, “Hermite-gaussian mode patterns in GaAs junction lasers”, Appl. Phys. Lett., Vol.10, No.3, p.84, Feb. 1, 1967.
- [67IKE] T. Ikegami and Y. Suematsu, “Resonance-like characteristics of the direct modulation of a junction laser”, Proc. IEEE, Vol.55, No.1, pp.122-123, Jan. 1967.
- [67KAP] N. S. Kapany, “Fiber optics”, Academic Press, New York, 1967.
- [67KAW] S. Kawakami and J. Nishizawa, “Kinetics of an optical wave packet in a lens-like medium”, J. Appl. Phys., Vol.38, No.11, p.4807, Nov. 1967.
- [67KOR] E. T. Kornhauser and A. D. Yaghjian, “Model solution of a point source in a strongly focusing medium”, Radio Sci., Vol.2, No.3, p.299, Mar. 1967.
- [68IKEa] T. Ikegami and Y. Suematsu, “The direct modulation of a semiconductor junction laser”, Trans. IECE Japan, Vol.51-B, No.2, pp.57-63, Feb. 1968.
- [68IKEb] T. Ikegami and Y. Suematsu, “Carrier lifetime measurement of a junction laser using direct modulation”, IEEE J. Quantum Electron., Vol.QE-4, No.4, pp.148-151, Apr. 1968.
- [68KAO] K. C. Kao and T. W. Davies, “Spectrophotometric studies of ultra low loss optical glasses 1 : Single beam method”, J. Sci. Instrum., Vol.1, (ser. 2), p.1063, 1968.
- [68KAW] S. Kawakami and J. Nishizawa, “An optical waveguide with optimum distribution of the refractive with reference to waveform distortion”, IEEE Trans. Microwave Theory & Tech., Vol.MTT-16, No.10, p.814 Oct. 1968.
- [68SCH] E. R. Schineller, R. R. Flam and D. W. Wilmot, “Optical waveguides formed by proton irradiation of fused silica”, J. Opt. Soc. Am., Vol.58, pp.1171-1176, Sept. 1968.
- [68SHU] R. Shubert and J. H. Harris, “Optical surface wave on thin films and their application to integrated data processors”, IEEE Trans. Microwave Theory & Tech., Vol.MTT-16, p.1048, Dec. 1968.
- [68SUS] W. Susaki, T. Sogo and T. Oku, “Lasing action in $(\text{Ga}_{1-x}\text{Al}_x)\text{As}$ diodes”, IEEE J. Quantum Electron., Vol.QE-4, No.6, p.422, June 1968.
- [68TAK] J. Takamiya, F. Kitasawa and J.-I. Nishizawa, “Amplitude modulation of diode laser in millimeter wave region”, Proc. IEEE (Lett.), Vol.56, p.135, Jan. 1968.
- [68WAR] A. W. Warner and A. H. Meitzler, “Performance of bonded, single crystal LiNbO_3 and LiGaO_3 as ultrasonic transducers operating above 100 MHz”, Proc. IEEE (Lett.), Vol.56, No.8, p.1376, Aug. 1968.
- [69ALF] Zh. I. Alferov, V. M. Andreev, E. L. Portnoi and M. K. Trukan, “AlAs-GaAs heterojunction injection lasers with a low room-temperature threshold”, Fiz. Tekh. Poluprov., Vol.3, p.1328, Sept. 1969. (Sov. Phys. Semicond., Vol.3, p.1107, Mar. 1970.)
- [69CAS] H. C. Casey and M. B. Panish, “Composition dependence of the $\text{Ga}_{1-x}\text{Al}_x\text{As}$ direct and indirect energy bandgaps”, J. Appl. Phys., Vol.40, No.12, p.4190, Nov. 1969.

- [69GOEa] J. E. Goell, "A circular-harmonic computer analysis of rectangular dielectric waveguides", Bell Syst. Tech. J., Vol.48, No.7, p.2133, Sept. 1969.
- [69GOEb] J. E. Goell and R. D. Standley, "Sputtered glass waveguide for integrated optics", Bell Syst. Tech. J., Vol.48, p.3445, Dec. 1969.
- [69HAU] H. Haug, "Quantum-mechanical rate equations for semiconductor lasers", Phys. Rev., Vol.184, pp.338-348, Aug. 1969.
- [69KUR] C. N. Kurtz and W. Streifer, "Guided waves in inhomogeneous focusing media part I, Formulation, solution for quadratic inhomogeneity", IEEE Trans. Microwave Theory & Tech., Vol.MTT-17, No.1, p.11, Jan. 1969.
- [69MARa] E. A. J. Marcatili and S. E. Miller, "Improved relations describing directional control in electromagnetic wave guidance", Bell Syst. Tech. J., Vol.48, No.7, p.2161, Sept. 1969.
- [69MARb] E. A. J. Marcatili, "Bends in optical dielectric guides", Bell Syst. Tech. J., Vol.48, No.7, p.2103, Sept. 1969.
- [69MARc] E. A. J. Marcatili, "Dielectric rectangular waveguide and directional coupler for integrated optics", Bell Syst. Tech. J., Vol.48, p.2071, Dec. 1969.
- [69MIL] S. E. Miller, "Integrated optics : An introduction", Bell Syst. Tech. J., Vol.48, No.7, p.2059, Sept. 1969.
- [69PEA] A. D. Pearson, W. G. French and E. G. Rawson, "Preparation of a light focusing glass rod by ion exchange techniques", Appl. Phys. Lett., Vol.15, No.2, p.76, July 15, 1969.
- [69SNYa] A. W. Snyder, "Asymptotic expressions for eigenfunctions and eigenvalues of a dielectric of optical waveguide", IEEE Trans. Microwave Theory & Tech., Vol.MTT-17, No.12, p.1310, Dec. 1969.
- [69SNYb] A. W. Snyder, "Excitation and scattering of modes on a dielectric or optical fiber", IEEE Trans. Microwave Theory & Tech., Vol.MTT-17, No.12, p.1138, Dec. 1969.
- [69SUE] T. Sueta, K. Goto and T. Makimoto, "A reflection-type traveling-wave light modulation", IEEE J. Quantum Electron., Vol.QE-5, No.6, p.330, June 1969.
- [69TIE] P. K. Tien, R. Ulrich and R. J. Martin, "Modes of light waves in thin deposited semiconductor films", Appl. Phys. Lett., Vol.14, No.9, p.291, May 1969.
- [69UCH] T. Uchida, M. Furukawa, I. Kitano, K. Koizumi and H. Matsumura, "A light-focusing fiberguide", Presented at the IEEE Conf. on Laser Eng. and Appl., Washington, D. C., May 1969 ; IEEE J. Quantum Electron., Vol.QE-5, No.6, p.331, June 1969.
- [70BUR] C. A. Burrus and R. W. Dawson, "Small-area, high-current-density GaAs electroluminescent diodes and a method of operation for improved degradation characteristics", Appl. Phys. Lett., Vol.17, No.3, pp.97-99, Aug. 1970.
- [70DAK] M. L. Dakss, L. Kuhn, P. F. Heidrich and B. A. Scott, "Grating coupler for efficient excitation of optical guided waves in thin films", Appl. Phys. Lett., Vol.16, No.12, p.523, June 1970.
- [70HAL] D. Hall, A. Yariv and E. Garmire, "Observation of propagation cutoff its control in thin optical waveguides", Appl. Phys. Lett., Vol.17, No.3, p.127, Aug. 1970.
- [70HAR] J. H. Harris, R. Shubert and J. N. Polky, "Beam coupling to films", J. Opt. Soc. Am., Vol.60, p.1007, 1970.
- [70HAY] I. Hayashi, P. B. Panish, P. W. Foy and S. Sumski, "Junction lasers which operate continuously at room temperature", Appl. Phys. Lett., Vol.17, No.3, p.109, Aug. 1, 1970.
- [70IKEa] T. Ikegami, K. Kobayashi and Y. Suematsu, "Transient behavior of semiconductor injection lasers", Trans. IECE Japan, Vol.53-B, No.5, pp.253-263, May 1970.

- [70IKEb] T. Ikegami and Y. Suematsu, "Large signal characteristics of directly modulated semiconductor injection lasers", Trans. IECE Japan, Vol.53-B, No.9, pp.513-519, Sept. 1970.
- [70KAP] F. P. Kapron, D. B. Keck and R. D. Maurer, "Radiation losses in glass optical waveguides", Appl. Phys. Lett., Vol.17, No.7, p.423, Nov. 15, 1970.
- [70KUH] L. Kuhn, M. L. Dakss, P. F. Heidrich and B. A. Scott, "Deflection of an optical guided wave by a surface acoustic wave", Appl. Phys. Lett., Vol.17, No.6, pp.265-267, Sept. 1970.
- [70MARa] D. Marcuse, "Radiation losses of the dominant mode in round dielectric waveguides", Bell Syst. Tech. J., Vol.49, No.8, p.1665, Oct. 1970.
- [70MARb] E. A. J. Marcatili, "Dielectric guide with curved axis and truncated parabolic index", Bell Syst. Tech. J., Vol.49, No.8, p.1645, Oct. 1970.
- [70MID] J. E. Midwinter, "Evanescent field coupling into a thin-film waveguide", IEEE J. Quantum Electron., Vol.QE-6, No.10, p.583, Oct. 1970.
- [70PAN] M. B. Panish, I. Hayashi, and S. Sumski, "Double-heterostructure injection lasers with room-temperature thresholds as low as 2300 A/cm^2 ", Appl. Phys. Lett., Vol.16, No.8, p.326, Apr. 1970.
- [70SNY] A. W. Snyder, "Radiation losses due to variations of radius on dielectric or optical fibers", IEEE Trans. Microwave Theory & Tech., Vol.MTT-18, No.9, p.608, Sept. 1970.
- [70SUEa] Y. Suematsu, "Tunable parametric oscillator using a guided wave structure", Jpn. J. Appl. Phys., Vol.9, No.7, pp.798-805, July 1970.
- [70SUEb] 末松安晴, 清水達明, 北野利彦, "複素誘電率レンズ状媒質に沿うビーム波", 信学論, Vol.53-B, No.12, pp.801-808, Dec. 1970.
- [70TIE] P. K. Tien, R. Ulrich and R. J. Martin, "Optical second harmonic generation in form of coherent Cerenkov radiation from a thin-film waveguide", Appl. Phys. Lett., Vol.17, No.10, p.447, Nov. 1970.
- [70UCH] T. Uchida, M. Furukawa, I. Kitano, K. Koizumi and H. Matsumura, "Optical characteristics of a light focusing fiber guide and its applications", IEEE J. Quantum Electron., Vol.QE-6, No.10, p.606, Oct. 1970.
- [71AND] D. B. Anderson and J. T. Boyd, "Wideband CO_2 laser second harmonic generation phase matched in GaAs thin-film waveguides", Appl. Phys. Lett., Vol.19, No.8, p.266, Oct. 15, 1971.
- [71BIS] D. L. Bisbee, "Optical fiber joining technique", Bell Syst. Tech. J., Vol.50, No.10, pp.3153-3158, Dec. 1971.
- [71GLOa] D. Gloge, "Weakly guiding fibers", Appl. Opt., Vol.10, No.10, p.2252, Oct. 1971.
- [71GLOb] D. Gloge, "Dispersion in weakly guiding fibers", Appl. Opt., Vol.10, No.11, p.2442, Nov. 1971.
- [71HAM] J. M. Hammer, "Digital electro-optic grating deflector and modulator", Appl. Phys. Lett., Vol.18, p.147, 1971.
- [71HAR] J. H. Harris and R. Shubert, "Variable tunneling excitation of optical surface wave", IEEE Trans. Microwave Theory & Tech., Vol.MTT-19, p.269, 1971.
- [71HAY] I. Hayashi, M. B. Panish and F. K. Reinhart, "GaAs- $\text{Al}_x\text{Ga}_{1-x}\text{As}$ double heterostructure injection lasers", J. Appl. Phys., Vol.42, No.4, p.1929, Apr. 1971.
- [71KAP] F. P. Kapron and D. B. Keck, "Pulse transmission through a dielectric optical waveguide", Appl. Opt., Vol.10, No.7, p.1519, July 1971.
- [71KOG] H. Kogelnik and C. V. Shank, "Stimulated emission in a periodic structure", Appl. Phys. Lett., Vol.18, No.4, pp.152-154, Feb. 1971.
- [71MAR] D. Marcuse and E. A. Marcatili, "Excitation of waveguides for integrated optics with laser beams", Bell Syst. Tech. J., Vol.49, pp.43-57, Jan. 1971.

- [71PAX] K. B. Paxton and W. Streifer “Analytic solution of ray equation in cylindrically inhomogeneous guiding media, part 2 : Skew rays”, Appl. Opt., Vol.10, No.5, p.1164, May 1971.
- [71PER] S. D. Personick, “Time dispersion in dielectric waveguide”, Bell Syst. Tech. J., Vol.50, pp.843-859, Mar. 1971.
- [71SAK] I. Sakuma, H. Yonezu, K. Nishida, K. Kobayashi, H. Saito and Y. Nannichi, “Continuous operation of junction lasers at room temperature”, Jpn. J. Appl. Phys., Vol.10, No.2, p.282, 1971.
- [71SHU] R. Shubert and J. H. Harris, “Optical guided wave focusing and diffraction”, J. Opt. Soc. Am., Vol.61, No.2, p.154, Feb. 1971.
- [71STR] W. Streifer and K. B. Paxton, “Analytic solution of ray equation in cylindrically inhomogeneous media, part 1 : Meridional rays”, Appl. Opt., Vol.10, No.4, p.769, Apr. 1971.
- [71SUM] 住友徹, 松下茂, 小泉健, 古川元章, “イオン交換法による誘電体微小光回路”, 応用物理予稿集, IP-C-2, 1971.
- [71TIE] P. K. Tien, “Light waves in thin films and integrated optics”, Appl. Opt., Vol.10, p.2395, Nov. 1971.
- [72COH] L. G. Cohen, “Power coupling from GaAs injection lasers into optical fibers”, Bell Syst. Tech. J., Vol.51, No.3, pp.573-594, Mar. 1972.
- [72GAR] E. Garmire, H. Stoll, A. Yariv and R.G. Hunsperger, “Optical waveguiding in proton-implanted GaAs”, Appl. Phys. Lett., Vol.21, No.3, p.87, Aug. 1972.
- [72GLOa] D. Gloge, E. L. Chinnock and D. H. Ring, “Direct measurement of the (baseband) frequency response of multimode fibers”, Appl. Opt., Vol.11, No.7, p.1534, July 1972.
- [72GLOb] D. Gloge, A. R. Tynes, M. A. Duguay and J. W. Hasen, “Picosecond pulse distortion in optical fibers”, IEEE J. Quantum Electron., Vol.QE-8, No.2, p.217, Feb. 1972.
- [72GLOc] D. Gloge, “Optical power flow in multimode fibers”, Bell Syst. Tech. J., Vol.51, No.8, p.1767, Oct. 1972.
- [72IHA] A. Ihaya, H. Furuta and H. Noda. “Thin film optical directional coupler”, Proc. IEEE, Vol.60, p.470, 1972.
- [72IKE] T. Ikegami, “Reflectivity of mode at facet and oscillation mode in double-heterostructure injection lasers”, IEEE J. Quantum Electron., Vol.QE-8, No.6, p.470, June 1972.
- [72IZA] T. Izawa and H. Nakagome, “Optical waveguide formed by electrically induced migration of ions in glass plates”, Appl. Phys. Lett., Vol.21, No.12, p.584, Dec. 15, 1972.
- [72KAP] N. S. Kapany and J. J. Burke, “Optical waveguides”, Academic Press, New York, 1972.
- [72KEC] D. B. Keck, P. C. Schultz and F. Zimar, “Attenuation of multimode glass optical waveguides”, Appl. Phys. Lett., Vol.21, No.5, p.215, Sept. 1, 1972.
- [72KOG] H. Kogelnik and C. V. Shank, “Coupled wave theory of distributed feedback lasers”, J. Appl. Phys., Vol.43, No.5, pp.2327-2335, May 1972.
- [72KOL] E. D. Kolb, D. A. Pinnow, T. C. Rich, R. A. Laudise and A. R. Tynes, “Low optical loss synthetic quartz”, Nat. Res. Bull., Vol.7, p.397, 1972.
- [72KUR] 倉藺貞夫, 岩崎敬一郎, 熊谷信昭, “分布結合線路を用いた新しい光変調方式”, 信学論, Vol.55-C, No.1, p.62, Jan. 1972.
- [72MARa] D. Marcuse, “Power distribution and radiation losses in multimode dielectric slab waveguides”, Bell Syst. Tech. J., Vol.51, No.2, p.429, Feb. 1972.
- [72MARb] D. Marcuse, “Pulse propagation in multimode dielectric waveguides”, Bell Syst. Tech. J., Vol.51, No.6, p.1199, July/Aug. 1972.
- [72MARc] D. Marcuse, “Light transmission optics”, Van Nostrand, New York, 1972.

- [72MARD] W. E. Martin and D. B. Hall, "Optical waveguides by diffusion in III - V compounds", Appl. Phys. Lett., Vol.21, No.7, p.325, Oct. 1972.
- [72NIS] J. Nishizawa and A. Otsuka, "Solid state self-focusing surface waveguide (microguide)", Appl. Phys. Lett., Vol.21, No.2, p.48, July 15, 1972.
- [72SCH] D. P. Schinke, R. G. Smith, E. G. Spencer and M. F. Galvin, "Thin-film distributed-feedback laser fabricated by ion milling", Appl. Phys. Lett., Vol.21, No.10, p.494, Nov. 1972.
- [72SMI] R. G. Smith, "Optical power handling capacity of low-loss optical fibers as determined by stimulated Raman and Brillouin scattering", Appl. Opt., Vol.11, No.11, p.2489, Nov. 1972.
- [72STO] J. Stone, "Optical transmission in liquid-core quartz fibers", Appl. Phys. Lett., Vol.20, p.239, Apr. 1972.
- [72SUEa] 末松安晴, 山田実, "半導体レーザの姿態制御 I", 電子通信学会光量子エレクトロニクス研究会資料, QE72-39, Sep. 1972.
- [72SUEb] 末松安晴, 佐々木豊, 野田秀樹, 白田光有, 浅井映一, "伝送姿態差によるガラス薄膜の屈折率と膜厚の測定", 信学論, Vol.55-C, No.2, pp.98-105, Feb. 1972.
- [72SUEc] 末松安晴, 秋山和郎, 横井博, 佐々木豊, "薄膜の光パラメトリック相互作用と水晶基板・ガラス薄膜導波による第二高調波発生", 信学論, Vol.55-C, No.2, pp.106-113, Feb. 1972.
- [72SUEd] Y. Suematsu and K. Furuya, "Propagation mode and scattering loss of a two-dimensional dielectric waveguides with gradual distribution of refractive index", IEEE Trans. Microwave Theory & Tech., Vol.MTT-20, No.10, pp.524-531, Aug. 1972.
- [72SUEe] Y. Suematsu, K. Furuya, M. Hakuta and K. Chiba, "Properties of irregular boundary of R-F sputtered glass film for light guide", Proc. IEEE (Lett.), Vol.60, No.6, pp.744-745, June 1972.
- [72SUEf] Y. Suematsu, M. Hakuta, K. Furuya, K. Chiba and R. Hasumi, "Fundamental transverse electric field (TE_0) mode selection for thin-film asymmetric light guides", Appl. Phys. Lett., Vol.21, No.6, pp.291-293, Sept. 15, 1972.
- [72SUEg] Y. Suematsu and M. Yamada, "Transverse mode control in semiconductor laser", IEEE Semiconductor Laser Conf., May 16, 1972.
- [72TAK] T. Takano and J. Hamasaki, "Propagating modes of a metal-clad dielectric-slab waveguide for integrated optics", IEEE J. Quantum Electron., Vol.QE-8, No.2, p.206, Feb. 1972.
- [72TIE] P. K. Tien, R. J. Martin, S. L. Blank, S. H. Wemple and L. J. Varnerin, "Optical waveguides of single-crystal garnet films", Appl. Phys. Lett., Vol.21, No.5, p.207, Sept. 1972.
- [72YAJ] H. Yajima, S. Kawase, Y. Kawase and Y. Sekimoto, "Amplification of $1.06 \mu\text{m}$ using a Nd : glass thin-film waveguide", Appl. Phys. Lett., Vol.21, No.9, p.407, Nov. 1, 1972.
- [73CHI] E. L. Chinnock, L. G. Cohen, W. S. Holden, R. D. Standley and D. B. Keck, "The length dependence of pulse spreading in CGW-Bell-10 optical fiber", Proc. IEEE (Lett.), Vol.61, No.10, p.1499, Oct. 1973.
- [73CHU] N. Chubachi, J. Kushibiki and Y. Kikuchi, "Monolithically integrated Bragg reflector for an optical guided wave made of Zinc-oxide film", Electron. Lett., Vol.9, No.10, pp.193-194, May. 17, 1973.
- [73DAB] F. W. Dabby, M. A. Saifi and A. Kestenbaum, "High-frequency cutoff periodic dielectric waveguides", Appl. Phys. Lett., Vol.22, No.4, p.190, Feb. 1973.
- [73DEL] B. C. DeLoach, Jr., B. W. Hakki, R. L. Hartman and L. A. D'Asaro, "Degradation of CW GaAs double heterojunction lasers at 300 K", Proc. IEEE (Lett.), Vol.61, p.1042, July 1973.
- [73FRE] W. G. French, A. Pearson, G. W. Tasker and J. B. MacChesney, "A low-loss fused silica optical waveguide with borosilicate cladding", Appl. Phys. Lett., Vol.23, No.6, pp.338-339, Sept. 1973.

- [73GLO] D. Gloge and E. A. J. Marcatili, "Multimode theory of graded-core fibers", Bell Syst. Tech. J., Vol.52, No.9, pp.1563-1578, Nov. 1973.
- [73GOE] J. E. Goell, "A 27 Mb/s optical repeater experiment employing a GaAs laser", Proc. IEEE, Vol.61, No.10, p.1504, Oct. 1973.
- [73IID] S. Iida, K. Takata and Y. Unno, "Spectral behavior and line width of (GaAl) As-GaAs double-heterostructure lasers at room temperature with stripe geometry configuration", IEEE J. Quantum Electron., Vol.QE-9, No.2, p.361, Feb. 1973.
- [73IZU] 井筒雅之, 末田正, "誘電体導波路における光パラメトリック相互作用", 信学論, Vol.56-C, No.12, p.623, Dec. 1973.
- [73KAI] P. Kaiser, E. A. J. Marcatili and S. E. Miller, "A new optical fiber", Bell Syst. Tech. J., Vol.52, No.2, p.265, Feb. 1973.
- [73KATa] D. Kato, "Fused-silica-core glass fiber as a low-loss optical waveguide", Appl. Phys. Lett., Vol.22, No.1, pp.3-4 Jan. 1, 1973.
- [73KATb] D. Kato, "Light coupling from a stripe-geometry GaAs diode laser into an optical fiber with spherical end", J. Appl. Phys., Vol.44, pp.2756-2758, June 1973.
- [73KEC] D. B. Keck, R. D. Maurer and P. C. Schultz, "On the ultimate lower limit of attenuation in glass optical waveguides", Appl. Phys. Lett., Vol.22, No.7, pp.307-309, Apr. 1, 1973.
- [73KOI] K. Koizumi, Y. Ikeda, M. Furukawa and T. Sumimoto, "New light-focusing glass fibers made by a continuous process", presented at the 1973 Conf. on Laser Engineering and Applications, Washington, D. C. ; IEEE J. Quantum Electron., Vol.QE-9, No.6, p.639, June 1973.
- [73LEE] T. P. Lee, C. A. Burrus, Jr. and B. I. Miller, "A stripe-geometry double-heterostructure amplified-spontaneous-emission (super-luminescent) diode", IEEE J. Quantum Electron., Vol.QE-9, No.8, p.820, Aug. 1973.
- [73MARa] D. Marcuse, "Losses and impulse response of a parabolic index fiber with random bends", Bell Syst. Tech. J., Vol.52, No.8, pp.1423-1437, Oct. 1973.
- [73MARb] D. Marcuse, "The impulse response of an optical fiber with parabolic index profile", Bell Syst. Tech. J., Vol.52, No.7, p.1169, Sept. 1973.
- [73MIL] S. E. Miller, E. A. J. Marcatili and T. Li, "Research toward optical-fiber transmission system", Proc. IEEE, Vol.61, No.12, p.1703, Dec. 1973.
- [73MIY] S. Miyazawa, "Growth of LiNbO₃ single-crystal for optical waveguides", Appl. Phys. Lett., Vol.23, No.4, p.198, Aug. 1973.
- [73NAK] M. Nakamura, A. Yariv, H. W. Yen, S. Somekh and H. L. Garvin, "Optically pumped GaAs surface laser with corrugation feedback", Appl. Phys. Lett., Vol.22, No.10, p.515, May 1973.
- [73OHM] Y. Ohmachi, "Acousto-optical light diffraction in thin films", J. Appl. Phys., Vol.44, p.3928, Sept. 1973.
- [73PAN] M. B. Panish, H. C. Casey, Jr., S. Sumski and P. W. Foy, "Reduction of threshold current density in GaAs-Al_xGa_{1-x}As heterostructure lasers by separate optical confinement and carrier confinement", Appl. Phys. Lett., Vol.22, No.11, p.590, June 1973.
- [73PER] S. D. Personick, "Receiver design for digital fiber optic communication systems - Part I and Part II", Bell Syst. Tech. J., Vol.52, No.6, pp.843-886, July-Aug. 1973.
- [73PIN] D. A. Pinnow, T. C. Rich, F. W. Ostermeyer and M. DiDomenico, "Fundamental optical attenuation limits in the liquid and glassy state with application to fiber optical waveguide materials", Appl. Phys. Lett., Vol.22, No.10, pp.527-549, May 1973.

- [73REI] F. K. Reinhart, "Electroabsorption in $\text{Al}_y\text{Ga}_{1-y}\text{As}-\text{Al}_x\text{Ga}_{1-x}\text{As}$ double heterostructures", Appl. Phys. Lett., Vol.22, No.4, p.372, Apr. 1973.
- [73SHA] C. V. Shank and R. V. Schmidt, "Optical technique for producing $0.1\ \mu\text{m}$ periodic surface structures", Appl. Phys. Lett., Vol.23, No.3, p.154, Aug. 1973.
- [73SOM] S. Somekh, E. Garmire and A. Yariv, "Channel optical waveguide directional couplers", Appl. Phys. Lett., Vol.22, No.2, p.46, Jan. 1973.
- [73SUEa] Y. Suematsu, K. Furuya and T. Kambayashi, "Focusing properties of thin-film lenslike light guide for integrated optics", Appl. Phys. Lett., Vol.23, No.2, pp.78-79, July 15, 1973.
- [73SUEb] Y. Suematsu, Y. Sasaki and K. Shibata, "Second-harmonic generation due to a guided wave structure consisting of quartz coated with a glass film", Appl. Phys. Lett., Vol.23, No.3, pp.137-138, Aug. 1, 1973.
- [73TRA] J. C. Tracy, W. Wiegman, R. A. Logan and F. K. Reinhart, "Three-dimensional light guides in single-crystal $\text{GaAs}-\text{Al}_x\text{Ga}_{1-x}\text{As}$ ", Appl. Phys. Lett., Vol.22, No.10, p.511, May 1973.
- [73UCH] N. Uchida, S. Fukunishi and S. Saito, "High-frequency acoustooptic device using ultrasonically bonded and sputter-machined LiNbO_3 transducer", IEEE J. Quantum Electron., Vol.QE-9, No.6, p.660, June 1973.
- [73YAJ] H. Yajima, "Dielectric thin-film optical branching waveguide", Appl. Phys. Lett., Vol.22, No.12, p.647, June 15, 1973.
- [73YAM] 山本錠彦, 牧本利夫, "非等方薄膜光導波路の回路論的取扱いと非可逆素子設計への応用", 信学論, Vol.56-C, No.3, p.187, Mar. 1973.
- [74CAS] H. C. Casey, Jr., D. D. Sell and M. B. Panish, "Refractive index of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ between 1.2 and 1.8 eV", Appl. Phys. Lett., Vol.23, No.2, p.63, Jan. 15, 1974.
- [74FUR] H. Furuta, H. Noda and A. Ihaya, "Novel optical waveguide for integrated optics", Appl. Opt., Vol.13, No.2, p.322, Feb. 1974.
- [74IKEa] M. Ikeda, "Propagation characteristics of multimode fibers with graded core index", IEEE J. Quantum Electron., Vol.QE-10, No.3, p.362, Mar. 1974.
- [74IKEb] 池上徹彦, "直接変調半導体レーザのスペクトル特性", 電子通信学会全国大会, S14-2, July 1974.
- [74ITO] H. Ito, N. Uesugi and H. Inaba, "Phase-matched guided optical second harmonic wave generation in oriented polycrystalline thin film waveguides", Appl. Phys. Lett., Vol.25, No.7, p.385, Oct. 1, 1974.
- [74KOB] S. Kobayashi, H. Nakagome, N. Shimizu, H. Tsuchiya and T. Izawa, "Low-loss optical glass fiber with $\text{Al}_2\text{O}_3 \cdot \text{SiO}_2$ core", Electron. Lett., Vol.10, No.20, pp.410-411, Oct. 1974.
- [74MACa] J. B. MacChesney, P. B. O'Connor and J. R. Simpson, "A new technique for the preparation of low-loss and graded-index optical fibers", Proc. IEEE, Vol.62, No.9, pp.1280-1281, Sept. 1974.
- [74MACb] J. B. MacChesney, P. B. O'Connor, F. V. DiMarcello, J. R. Simpson and P. D. Lazay, "Preparation of low loss optical fibers using simultaneous vapor phase deposition and fusion", 10th International Congress on Glass, Kyoto (Japan), July 1974.
- [74MAR] D. Marcuse, "Theory of dielectric optical waveguides", Academic Press, New York, 1974.
- [74MAU] R. D. Maurer, "Fibers of high silica composition for optical communications", 10th International Congress on Glass, 2A-10, Kyoto (Japan), July 1974.
- [74MCC] J. B. MacChesney and P. B. O'Connor, U.S. Patent 4217027, 1974.
- [74MIY] T. Miyashita, T. Eda, S. Takahashi, M. Horiguchi and K. Masuno, "Eccentric-core glass optical waveguide", J. Appl. Phys., Vol.45, No.2, p.808, 1974.
- [74OHT] Y. Ohtsuka, T. Senga and H. Yasuda, "Light-focusing plastic rod with low chromatic aberration",

- Appl. Phys. Lett., Vol.25, No.11, p.659, Dec. 1974.
- [74OKO] T. Okoshi and K. Okamoto, "Analysis of wave propagation in inhomogeneous optical fibers using a variational method", IEEE Trans. Microwave Theory & Tech., Vol.MTT-22, No.11, p.938, Nov. 1974.
- [74PAY] D. N. Payne and W. A. Gambling, "New silica-based low-loss optical fiber", Electron. Lett., Vol.10, No.15, pp.289-290, July 1974.
- [74PET] P. Petroff and R. L. Hartman, "Rapid degradation phenomenon in hetero junction GaAlAs-GaAs lasers", J. Appl. Phys., Vol.45, No.9, p.3899, Sept. 1974.
- [74SHA] C. V. Shank, R. V. Schmidt and B. I. Miller, "Double-heterostructure GaAs distributed-feedback laser", Appl. Phys. Lett., Vol.25, No.4, pp.200-201, Aug. 1974.
- [74SUEa] 末松安晴, 古屋一仁, "多変態誘電体光導波路の屈折率分布と群遅延特性", 信学論, Vol.57-C, No.9, pp.289-296, Sept. 1974.
- [74SUEb] 末松安晴, 山田実, "ストライプ状半導体レーザの発振変態と制御", 信学論, Vol.57-C, No.11, pp.434-440, Nov. 1974.
- [74SUZ] Y. Suzuki and H. Kashiwagi, "Polymer-clad fused-silica optical fiber", Appl. Opt., Vol.13, No.1, p.1, Jan. 1974.
- [74TAD] K. Tada and K. Hirose, "A new light modulator using perturbation of synchronism between coupled guides", Appl. Phys. Lett., Vol.25, No.10, p.561, Nov. 15, 1974.
- [74TIE] K. Tien and S. Riva-Sanseverino, "Light beam scanning and deflection in epitaxial LiNbO₃ electro-optic waveguides", Appl. Phys. Lett., Vol.25, No.10, pp.563, Nov. 1974.
- [74TSU] T. Tsukada, "GaAs-Ga_{1-x}Al_xAs buried heterostructure injection lasers", J. Appl. Phys., Vol.45, No.11, p.4899, Nov. 1974.
- [74UEH] S. Uehara, Y. Yamauchi and T. Isawa, "Optical intensity modulator with waveguide structure", Appl. Phys. Lett., Vol.24, p.19, Jan. 1974.
- [74YON] H. Yonezu, I. Sakuma, T. Kamejima, M. Ueno, K. Nishida, Y. Nannichi and I. Hayashi, "Degradation mechanism of (AlGa) As double hetero structure laser diodes", Appl. Phys. Lett., Vol.24, No.1, p.18, Jan. 1, 1974.
- [74YOS] K. Yoshimura, T. Nakahara, A. Tsukamoto and A. Isomura, "Low-loss plastic-cladding fiber", Electron. Lett., Vol.10, No.25/26, pp.534-535, Dec. 1974.
- [75BAG] A. P. Bagatov, et al., "Radiative characteristics of InP-GaInPAs laser structures", Fiz. & Tech. Poluprovodn., Vol.9, No.10, p.1959, Oct. 1975.
- [75BLA] R. W. Blackmore, et al., "8.448 Mbits optical fibre system", 1st European Conf. on Opt. Fibre Commun., p.182, Sept. 1975.
- [75BOE] P. M. Boers, M. T. Vlaardingerbroek and M. Danielsen, "Dynamic behavior of semiconductor lasers", Electron. Lett., Vol.11, No.10, pp.206-207, May 1975.
- [75BOG] A. P. Bogatov, L. M. Dolginov, P. G. Eliseev, M. G. Milvidskii, B. N. Sverdlov and E. G. Shevchenko, "Radiative characteristics of InP-GaInPAs laser heterostructures", Sov. Phys. Semicond., Vol.9, No.10, pp.1282-1285, Oct. 1975.
- [75BOR] M. Born and E. Wolf, "Principles of optics", (5th Ed.), Pergamon Press, New York, 1975.
- [75CAM] J. C. Campbell, F. A. Blum, D. W. Shaw and K. L. Lawley, "GaAs electro-optic directional-coupler switch", Appl. Phys. Lett., Vol.27, No.4, p.202, Aug. 15, 1975.
- [75DAW] R. W. Dawson, "Pseudo random 250 Mb/s modulation of GaAs LEDs", Electron. Lett., Vol.11, No.7, p.144, Apr. 1975.
- [75FURa] K. Furuya, Y. Suematsu, J. Nayyer and S. Ishikawa, "External higher index mode filters for band

- widening of multimode optical fibers”, Appl. Phys. Lett., Vol.27, No.8, pp.456-463, Oct. 1975.
- [75FURb] 古屋一仁, 末松安晴, “外部に高屈折率層の付いたレンズ状媒質の姿態フィルタ特性”, 信学論, Vol.58-C, No.11, p.662, Nov. 1975.
- [75GLO] D. Gloge, “Optical-fiber packaging and its influence on fiber straightness and loss”, Bell Syst. Tech. J., Vol.54, No.2, pp.245-262, Feb. 1975.
- [75HAK] B. Hakki and T. Paoli, “Gain spectra in GaAs double-heterostructure injection lasers”, J. Appl. Phys., Vol.46, No.3, pp.1299-1306, Mar. 1975.
- [75HUR] C. E. Hurwitz, J. A. Rossi, J. J. Hsieh and C. M. Wolfe, “Integrated GaAs-AlGaAs double-heterostructure lasers”, Appl. Phys. Lett., Vol.27, No.4, pp.241-243, Aug. 1975.
- [75IGAa] 伊賀健一, 横森清, “拡散レンズによるレンズ状媒質の誘電率分布係数”, 信学論, Vol.58-C, No.5, pp.283-285, May 1975.
- [75IGAb] K. Iga and K. Yokomori, “Lens-like medium using a diffused composite-elliptic core”, Proc. IEEE (Lett.), Vol.63, No.6, pp.988-989, June 1975.
- [75IGAc] K. Iga, K. Yokomori and T. Sakayori, “Optimum diffusion in the fabrication of a plastic lens-like medium”, Appl. Phys. Lett., Vol.26, No.10, pp.578-579, May 15, 1975.
- [75IGAd] K. Iga and K. Kawabata, “Active Bragg reflector and its application to semiconductor laser”, Jpn. J. Appl. Phys., Vol.14, No.3, pp.427-428, Mar. 1975.
- [75IKEa] M. Ikeda, M. Tateda and H. Yoshikiyo, “Refractive index profile of a graded index fiber : Measurement by a reflection method”, Appl. Opt., Vol.14, No.4, p.814, Apr. 1975.
- [75IKEb] T. Ikegami, “Spectral broadening and tailing effect in directly modulated injection lasers”, 1st European Conf. Optical Fiber Communication, p.111, Sept. 1975.
- [75ITO] T. Ito, et al., “A 400 Mb/s optical transmission experiment using a graded index fiber”, Post Off. Electr. Eng., J., Vol.68, 11, 16, p.375, Aug. 1975.
- [75KAM] I. P. Kaminow, L. W. Stultz and E. H. Turner, “Efficient strip-waveguide modulator”, Appl. Phys. Lett., Vol.27, No.10, p.555, Nov. 15, 1975.
- [75KAW] S. Kawakami and S. Nishida, “Perturbation theory of a doubly clad optical fiber with a low-index inner cladding”, IEEE J. Quantum Electron., Vol.QE-11, No.4, pp.130-138, Apr. 1975.
- [75KUR] K. Kurokawa, et al., “A 400 Mb/s experimental transmission system using a graded index fiber”, Electron. Lett., Vol.11, No.24, p.159, Nov. 27, 1975.
- [75LAN] R. Lang and K. Kobayashi, “Suppression of relaxation oscillation in semiconductor laser”, 1975 CLEA, 16 · 2, 1975.
- [75MER] J. L. Merz, R. A. Logan, W. Wiegmann and A. C. Gossard, “Taper couplers for GaAs-Al_xGa_{1-x}As waveguide layers produced by liquid phase and molecular beam epitaxy”, Appl. Phys. Lett., Vol.26, No.6, pp.337-340, Mar. 1975.
- [75MIL] C. M. Miller, “A fiber-optic-cable connector”, Bell Syst. Tech. J., Vol.54, No.9, pp.1547-1555, Nov. 1975.
- [75MUR] H. Murata, S. Inao and Y. Matsuda, “Step index type optical fiber cable”, 1st Europ. Conf. on Opt. Fiber Commun., London, p.70, 1975.
- [75NAH] R. E. Nahory and M. A. Pollack, “Low-threshold room-temperature double-heterostructure GaAs_{1-x}Sb_x/Al_yGa_{1-y}As_{1-x}Sb_x injection lasers at 1 μ m wavelength”, Appl. Phys. Lett., Vol.27, No.10, p.562, Nov. 15, 1975.
- [75NAK] M. Nakamura, K. Aiki, J. Umeda and A. Yariv, “CW operation of distributed-feedback GaAs-GaAlAs diode lasers at temperature up to 300 K”, Appl. Phys. Lett., Vol.27, No.7, pp.403-405, Oct. 1975.

- [75NAN] Y. Nannichi, J. Matsui and K. Ishida, "Rapid degradation in double heterostructure lasers", Jpn. J. Appl. Phys., Vol.14, No.10, p.1561, Oct. 1975.
- [75NAW] K. Nawata, K. Takano, T. Ikegami and S. Ohara, "100 Mb/s optical-repeater experiment employing graded index fibers", Electron. Lett., Vol.11, No.24, p.583, Nov. 27, 1975.
- [75NOD] J. Noda, N. Uchida, M. Minakawa, T. Saku, S. Saito and Y. Ohmachi, "Electrooptic intensity modulation in LiTaO₃ ridge waveguide", Appl. Phys. Lett., Vol.26, No.6, p.298, Mar. 15, 1975.
- [75OLS] R. Olshansky, "Mode coupling effects in graded-index optical fibers", Appl. Opt., Vol.14, No.4, p.935, Apr. 1975.
- [75OZE] T. Ozeki, T. Ito and T. Tamura, "Tapered section of multimode cladded fibers as mode filters and mode analyzers", Appl. Phys. Lett., Vol.26, No.7, p.386, Apr. 1975.
- [75PAY] D. N. Payne and W. A. Gambling, "Zero material dispersion in optical fibers", Electron. Lett., Vol.11, No.8, pp.176-178, Apr. 17, 1975.
- [75PEA] T. P. Pearsall, R. E. Nahory and M. A. Pollack, "Impact ionization coefficients for electrons and holes in In_{0.14}Ga_{0.86}As", Appl. Phys. Lett., Vol.27, No.6, p.330, Sept. 15, 1975.
- [75REI] F. K. Reinhart, R. A. Logan and C. V. Shank, "GaAs-Al_xGa_{1-x}As injection lasers with distributed Bragg reflectors", Appl. Phys. Lett., Vol.27, No.1, pp.45-48, July 1975.
- [75SCH] D. Schicketanz and G. Zeidler, "GaAs-double heterostructure lasers as optical amplifiers", IEEE J. Quantum Electron., Vol.QE-11, No.2, p.65, Feb. 1975.
- [75SCI] D. R. Scifres, R. D. Burnham and W. Streifer, "Output coupling and distributed feedback utilizing substrate corrugations in double-heterostructure GaAs lasers", Appl. Phys. Lett., Vol.27, No.5, pp.295-297, Sept. 1975.
- [75SUEa] Y. Suematsu, M. Yamada and K. Hayashi, "A multi-hetero-AlGaAs laser with integrated twinguide", Proc. IEEE (Lett.), Vol.63, No.1, pp.208-209, Jan. 1975.
- [75SUEb] Y. Suematsu, M. Yamada and K. Hayashi, "Integrated twin-guide AlGaAs laser with multihetero-structure", IEEE J. Quantum Electron., Vol.QE-11, No.7, pp.457-463, July 1975.
- [75SUEc] 末松安晴, 上林利生, 古屋一仁, "薄膜レンズ状導波路の集束特性", 信学論, Vol.58-C, No.10, pp.575-581, Oct. 1975.
- [75SUEd] 末松安晴, 岸野克己, 林健二, "集積二重導波路形レーザの動作理論", 信学論, Vol.58-C, No.11, pp.654-660, Nov. 1975.
- [75TAK] 高宮三郎, 近藤明博, 白幡潔, "低雑音シリコンアバランシェフォトダイオード", 信学論, Vol.58-C, No.4, p.217, Apr. 1975.
- [75TAM] T. Tamir, ed., "Integrated Optics", Springer-Verlag, Berlin, 1975.
- [75TAN] S. Tanaka, K. Inada, T. Akimoto and M. Kozima, "Silicon-clad fused-silica-core fiber", Electron. Lett., Vol.11, No.7, pp.153-154, Apr. 1975.
- [75TSA] C. S. Tsai and P. Saunier, "Ultrafast guided-light beam deflection/switching and modulation using simulated electro-optic prism structures in LiNbO₃ waveguides", Appl. Phys. Lett., Vol.27, No.4, pp.248, Aug. 1975.
- [75TUC] 土屋治彦, 中込弘, 清水延男, "二重偏心光コネクタの損失特性", 信学技報, Vol.OQE75-52, July 1975.
- [75UEN] Y. Ueno, et al., "A 40 Mb/s and 400 Mb/s repeater for fiber optic communication", 1st European Conf. on Opt. Fiber Commun., p.147, Sept. 1975.
- [75YAMa] 山田実, 林健二, 末松安晴, 岸野克己, "電流注入で動作する集積二重導波路形 AlGaAs レーザ", 信学論, Vol.58-C, No.3, pp.162-163, Mar. 1975.

- [75YAMb] Y. Yamamoto, T. Kamiya and H. Yanai, "Propagation characteristics of a partially metal-clad optical guide", Appl. Opt., Vol.14, No.2, p.322, Feb. 1975.
- [75YAMc] J. Yamagata, et al., "A 32 Mb/s regenerative repeater for cable transmission", 1st European Conf. on Opt. Fiber Commun., p.144, Sept. 1975.
- [75ZIE] J. P. van der Ziel, R. Dingle, R. C. Miller, W. Wiegman and W. A. Nordland, Jr., "Laser oscillation from quantum states, in very thin GaAs-Al_{0.2}Ga_{0.8}As multilayer structures", Appl. Phys. Lett., Vol.26, No.8, pp.463-465, 1975.
- [76AIK] K. Aiki, M. Nakamura and J. Umeda, "Frequency multiplexing light source with monolithically integrated distributed feedback diode lasers", Appl. Phys. Lett., Vol.29, No.8, pp.506-508, Oct. 1976.
- [76AOK] 青本文雄, 安藤洪也, 深津啓典, "電力用光ファイバ通信方式", 電学誌, Vol.96, No.12, p.1079, Dec. 1976.
- [76CAS] H. C. Casey, Jr., S. Somekh and M. Ilegems, "Room temperature operation of low threshold separate confinement heterostructure injection laser with distributed feedback", IEEE Trans. Electron Devices, Vol.ED-22, No.11, p.1060, Nov. 1975.
- [76CHO] A. Y. Cho, R. W. Dixon, H. C. Casay, Jr. and R. L. Hartman, "Continuous room temperature operation of GaAs-Al_xGa_{1-x}As double heterostructure lasers prepared by molecular-beam epitaxy", Appl. Phys. Lett., Vol.28, No.9, p.501, May 1, 1976.
- [76GEI] P. Geittner, D. Kuipers and H. Lydtin, "Low-loss optical fibers prepared by plasma-activated chemical vapor deposition (CVD)", Appl. Phys. Lett., Vol.28, No.11, pp.645-646, June 1, 1976.
- [76HIR] 平島利洋, 繁沢宏, 滝山敬, "光ファイバにおける姿勢分析", 信学論, Vol.59-C, No.4, p.258, Apr. 1976.
- [76HOR] M. Horiguchi and H. Osanai, "Spectral losses of low-OH-content optical fibers", Electron. Lett., Vol.12, No.12, p.310-311, June 10, 1976.
- [76HSIa] J. J. Hsieh, "Room-temperature operation of GaInAsP/InP double-heterostructure diode lasers emitting at 1.1 μm ", Appl. Phys. Lett., Vol.28, No.5, pp.283-285, Mar. 1, 1976.
- [76HSIb] J. J. Hsieh, J. A. Rossi and J. P. Donnelly, "Room-temperature cw operation of GaInAsP/InP double-hetero structure diode lasers emitting at 1.1 μm ", Appl. Phys. Lett., Vol.28, No.12, pp.709-711, June 1976.
- [76IGAa] K. Iga and Y. Takahashi, "Analysis on single wavelength oscillation of semiconductor laser at high speed pulse modulation", IEEE International Semiconductor Laser Conf., Nemunosato, LIV-6, 1976.
- [76IGAb] K. Iga, N. Yamamoto and Y. Matsuura, "Plastic focusing fiber for imaging applications", Conf. Lasers and Electro-Optical Systems, WD9, 1976.
- [76ITO] T. Ito, et al., "Optical-transmission experiment at 400 Mb/s using a single-mode fiber", Trans. IECE Japan, Vol.59-E, No.1, p.19, Jan. 1976.
- [76JOY] W. B. Joyce, R. W. Dixon and R. L. Hartman, "Statistical characterization double-heterostructure lasers", Appl. Phys. Lett., Vol.28, No.11, p.684, June 1, 1976.
- [76KOB] 小林郁太郎, 小山正樹, "マルチモードファイバの伝送特性", 信学技報, Vol.MW75-110, p.13, Jan. 1976.
- [76LAN] R. Lang and K. Kobayashi, "Suppression of the relaxation oscillation in the modulated output of semiconductor lasers", IEEE J. Quantum Electron., Vol.QE-12, No.3, pp.194-199, Mar. 1976.
- [76MAC] S. Machida, T. Ito, K. Nawata and T. Ikegami, "Spectrum fluctuation of multi-mode semiconductor lasers and direct modulation", IECE of Japan, Tech. Rep., No.OQE76-24, 1976.
- [76MAR] D. Marcuse, "Curvature loss formula for optical fibers", J. Opt. Soc. Am., Vol.66, No.3, pp.216-220,

- Mar. 1976.
- [76OE] K. Oe and K. Sugiyama, "GaInAsP/InP double-hetero structure lasers prepared by a new LPE apparatus", Jpn. J. Appl. Phys., Vol.15, No.12, pp.740-741, Dec. 1976.
 - [76OKAa] K. Okamoto and T. Okoshi, "Analysis of wave propagation in optical fibers having core with α -power refractive-index distribution and uniform cladding", IEEE Trans. Microwave Theory & Tech., Vol. MTT-24, No.7, pp.416-421, July 1976.
 - [76OKAb] 岡村浩司, 有馬忠夫, 後藤純二郎, 赤松武志, 井上浩蔵, "CVD 法で試作したファイバの屈折率低下 (Dip) の補償", 信学技報, Vol.OQE76-35, p.55, July 1976.
 - [76OKO] T. Okoshi and K. Hotate, "Refractive-index profile of an optical fiber : its measurement by the scattering-pattern method", Appl. Opt., Vol.15, No.11, pp.2756-2764, Nov. 1976.
 - [76OLS] R. Olshansky and D. B. Keck, "Pulse broadening in graded-index optical fibers", Appl. Opt., Vol.15, No.2, p.483, Feb. 1976.
 - [76PET] K. Petermann, "Theory of microbending loss in monomode fibers with arbitrary refractive index profile", Acta Electron. Ubertragung, Vol.30, pp.337-342, Sept. 1976.
 - [76SLA] F. M. E. Sladen, D. N. Payne and M. J. Adams, "Determination of optical fiber refractive index profiles by a near-field scanning technique", Appl. Phys. Lett., Vol.28, No.5, pp.255-258, Mar. 1976.
 - [76STEa] J. F. Stephany and I. P. Gates, "Bimorph optical beam deflector", Appl. Opt., Vol.15, No.2, p.307, Feb. 1976.
 - [76STEb] R. A. Steinberg and T. G. Giallorenzi, "Performance limitations imposed on optical waveguide switches and modulators by polarization", Appl. Opt., Vol.15, No.10, pp.2440-2453, Oct. 1976.
 - [76STI] G. E. Stillman, C. W. Wolf, C. O. Bozler and J. A. Rossi, "Electro absorption in GaAs and its application to waveguide detectors and modulators", Appl. Phys. Lett., Vol.28, No.9, p.544, May 1976.
 - [76SUEa] Y. Suematsu and S. Akiba, "High Speed Pulse Modulation of Injection Lasers at Non-Bias Condition", Trans. IECE Japan, Vol.E59, No.1, pp.1-7, Jan. 1, 1976.
 - [76SUEb] Y. Suematsu, K. Iga and K. Furuya, "Transmission characteristics of optical fiber", J. IECE Japan, Vol.59, No.7, pp.705-713, July 1976.
 - [76SUEc] 末松安晴, 伊賀健一, "光ファイバ通信入門", 第1版, オーム社, 東京, 1976. (改訂2版1982, 改訂3版1989)
 - [76TANa] T. Tanaka and Y. Suematsu, "An exact analysis of cylindrical fiber with index distribution by matrix method and its application to focusing fiber", Trans. IECE Japan, Vol.59-E, No.11, pp.1-8, Nov. 1976.
 - [76TANb] 田中捷樹, 斧田誠一, 角正雄, "多モード W 型ファイバにおける屈折率差と伝送帯域の関係", 信学技報, Vol.OQE75-100, p.25, Jan. 1976.
 - [76TSAa] W. Tsang and S. Wang, "GaAs-Ga_{1-x}Al_xAs double-heterostructure injection lasers with distributed Bragg reflectors", 9th IQEC, p.38, June 1976.
 - [76TSAb] W. T. Tsang and S. Wang, "GaAs-Ga_{1-x}Al_xAs double-heterostructure injection lasers with distributed Bragg reflectors", Appl. Phys. Lett., Vol.28, No.10, pp.596-598, May 1976.
 - [76WON] B. C. Wonsiewicz, W. G. French, P. D. Lazay and J. R. Simpson, "Automatic analysis of interferograms : optical waveguide refractive index profiles", Appl. Opt., Vol.15, No.4, pp.1048-1052, Apr. 1976.
 - [76YAM] M. Yamada, H. Nishizawa and Y. Suematsu, "Mode Selectivity in Integrated Twin-Guide Lasers", Trans. IECE Japan, Vol.E59, No.7, pp.9-10, July 1976.
 - [77ABE] M. Abe, I. Umebu, O. Hasegawa, S. Yamakoshi, T. Yamaoka, T. Kotani, H. Okada and H. Takanashi,

- “High efficiency long-lived GaAlAs LEDs for fiber-optical communications”, IEEE Trans. Electron Devices, Vol.ED-24, No.7, pp.990-994, July 1977.
- [77ALF] Zh. I. Alferov, A. T. Gorelenok, P. Kopiev, V. N. Mdivani and V. K. Tibilov, “Low-threshold lasers based on InGaAsP system heterostructures”, Pisma Zh. Tekh. Fiz., Vol.3, No.22, pp.1169-1171, 1977.
- [77BUU] J. Buus and M. Danielsen, “Carrier diffusion and higher order transversal modes in spectral dynamics of the semiconductor laser”, IEEE J. Quantum Electron., Vol.QE-13, No.8, pp.669-677, Aug. 1977.
- [77COH] L. G. Cohen and C. Lin, “Pulse delay measurements in the zero material dispersion wavelength region for optical fibers”, Appl. Opt., Vol.12, pp.3136-3139, Dec. 1977.
- [77DUP] R. D. Dupuis and P. D. Dapkus, “Ga_{1-x}Al_xAs/Ga_{1-y}Al_yAs double-heterostructure room temperature lasers grown by metalorganic chemical vapor deposition”, Appl. Phys. Lett., Vol.31, No.12, p.839, Dec. 15, 1977.
- [77HOR] S. Horiuchi, K. Ikeda, T. Tanaka and W. Susaki, “A new LED structure with a self-aligned sphere lens for efficient coupling to optical fibers”, IEEE Trans. Electron Devices, Vol.ED-24, No.7, pp.986-990, July 1977.
- [77HSI] J. J. Hsieh and C. C. Shen, “Room-temperature CW operation of buried-stripe double-heterostructure GaInAsP/InP diode lasers”, Appl. Phys. Lett., Vol.30, No.8, pp.429-431, Apr. 1977.
- [77IGAa] K. Iga, Laboratory Notebook, March 22, 1977.
- [77IGAb] K. Iga and N. Yamamoto, “Plastic focussing fiber for image applications”, Appl. Opt., Vol.16, No.5, pp.1305-1310, May 1977.
- [77ISH] H. Ishio and T. Miki, “A preliminary experiment of wavelength division multiplexing transmission using LED”, IOOC '77, C7-3, July 1977.
- [77ITA] Y. Itaya, Y. Suematsu and K. Iga, “Carrier lifetime measurement of GaInAsP/InP double-heterostructure lasers”, Jpn. J. Appl. Phys., Vol.16, No.6, pp.1057-1058, June 1977.
- [77ITO] T. Ito, S. Machida, K. Nawata and T. Ikegami, “Intensity fluctuation in each longitudinal mode of a multimode AlGaAs laser”, IEEE J. Quantum Electron., Vol.QE-13, No.8, pp.574-579, Aug. 1977.
- [77IZAa] T. Izawa, S. Kobayashi, S. Sudo and F. Hanawa, “Continuous fabrication of high silica fiber preform”, International Conference on Integrated Optics and Optical Fiber Communication (IOOC '77), C1-1, July 1977.
- [77IZAb] T. Izawa, N. Shibata and A. Takeda, “Optical attenuation in pure and doped fused silica in the IR wavelength region”, Appl. Phys. Lett., Vol.31, No.1, pp.33-35, July 1, 1977.
- [77KAP] F. Kapron, “Maximum information capacity of fiber-optic waveguide”, Electron. Lett., Vol.13, No.4, pp.96-97, Feb. 1977.
- [77KAWa] H. Kawanishi, Y. Suematsu and K. Kishino, “GaAs-Al_xGa_{1-x}As integrated twin-guide lasers with distributed Bragg reflectors”, IEEE J. Quantum Electron., Vol.QE-12, No.2, pp.64-65, Feb. 1977.
- [77KAWb] B. S. Kawasaki, K. O. Hill, D. C. Johnson and A. U. Tenne-Sens, “Full duplex transmission link over single-strand optical fiber”, Opt. Lett., Vol.1, No.3, pp.107-108, Sept. 1977.
- [77KAWc] M. Kawachi, A. Kawana and T. Miyashita, “Low-loss single-mode fiber at the material-dispersion-free wavelength of 1.27 μm ”, Electron. Lett., Vol.13, No.15, pp.442-443, July 1977.
- [77KOBa] 小林郁太郎, 小山正樹, 青山耕一, “光ファイバの伝送特性と周波数掃引法による測定”, 信学論, Vol.60-C, No.4, pp.243-250, April 1977.
- [77KOBb] S. Kobayashi, S. Shibata, N. Shibata and T. Izawa, “Refractive Index dispersion of doped silica”, IOOC '77, Tokyo, paper B8-3, July 1977.

- [77KOK] Y. Kokubun and K. Iga, "Precise measurement of the refractive index profile of optical fibers by a non destructive interference method", Trans. IECE Japan, Vol.60-E, pp.702-707, Dec. 1977.
- [77KOY] 小山正樹, 小林郁太郎, "摂動法によるマルチモードファイバの伝送理論", 信学論, Vol.J60-B, p.395, June 1977.
- [77MAR] E. A. J. Marcatili, "Modal dispersion in optical fibers with arbitrary numerical aperture and profile dispersion", Bell Syst. Tech. J., Vol.56, No.1, pp.49-63, Jan. 1977.
- [77MER] J. L. Merz and R. A. Logan, "Integrated GaAs-Al_xGa_{1-x}As injection lasers and detectors with etched reflectors", Appl. Phys. Lett., Vol.30, No.10, pp.530-533, May 1977.
- [77MIY] T. Miyashita, A. Kawana, M. Nakahara, M. Kawachi and T. Hosaka, "Fabrication of GeO₂-doped silica single mode fibers", IOOC '77, B6-4, July 1977.
- [77NAH] R. E. Nahory, M. A. Pollack and J. K. Abrokwhah, "Threshold characteristics and extended wavelength operation of GaAs_{1-x}Sb_x/Al_xGa_{1-x}As_{1-y}Sb_y double-heterostructure lasers", J. Appl. Phys., Vol.48, No.9, pp.3988-3990, Sept. 1977.
- [77NUE] C. J. Nuese, R. E. Enstrom and J. R. Appert, "1.7 μ m hetero-junction lasers and photodiodes of In_{0.53}Ga_{0.47}As/InP", IEEE Trans. Electron Devices, Vol.ED-24, Sept. 9, 1977.
- [77OE] K. Oe, S. Ando and K. Sugiyama, "1.3 μ m cw operation of GaInAsP/InP DH diode lasers at room temperature", Jpn. J. Appl. Phys., Vol.16, No.7, pp.1273-1274, July 1977.
- [77SHI] A. Shibukawa, A. Katsui, H. Iwamura and S. Hayashi, "Compact optical isolater for near-infrared radiation", Electron. Lett., Vol.13, No.11, pp.721-723, Nov. 24, 1977.
- [77SUE] Y. Suematsu, "Monolithic integration of optical circuits and related twin-guide lasers", International Conf. Integrated Opt. and Opt. Commun., B1-1, July 1977.
- [77SUG] S. Sugimoto, K. Minemura, K. Kobayashi, M. Seki, M. Shikada, A. Ueki, T. Yanase and T. Miki, "High speed digital signal transmission experiments by optical wavelength division multiplexing", IOOC '77, C7-4, July 1977.
- [77UNG] H. G. Unger, "Optical pulse distortion in glass fibers at the wavelength of minimum dispersion", Arch. Elektron. & Uebertragungstech., Vol.31, No.12, p.518, 1977.
- [77WAK] K. Wakao, K. Moriki, T. Kambayashi and K. Iga, "GaInAsP/InP DH laser grown by newly designed vertical LPE furnace", Jpn. J. Appl. Phys., Vol.16, No.11, pp.2073-2076, Nov. 1977.
- [77YAM] T. Yamamoto, K. Sakai, S. Akiba and Y. Suematsu, "Fast pulse behavior of InGaAsP/InP double-heterostructure lasers emitting at 1.27 μ m", Electron. Lett., Vol.13, No.3, pp.142-143, Mar. 1977.
- [77YAR] A. Yariv and M. Nakamura, "Periodic structures for integrated optics", IEEE J. Quantum Electron., Vol.QE-13, No.4, pp.233-253, Apr. 1977.
- [78AKIa] S. Akiba, Y. Itaya, K. Sakai, T. Yamamoto and Y. Suematsu, "Measurement of carrier lifetime in InGaAsP/InP double heterostructure lasers", Trans. IECE Japan, Vol.61-E, No.3, pp.124-128, Mar. 1978.
- [78AKIb] S. Akiba, K. Sakai and T. Yamamoto, "In_{0.53}Ga_{0.47}As/In_{1-x}Ga_xAs_yP_{1-y} double heterostructure lasers with emission wavelength of 1.67 μ m at room temperature", Jpn. J. Appl. Phys., Vol.17, No.10, pp.1899-1900, Oct. 1978.
- [78AKIc] S. Akiba, K. Sakai and T. Yamamoto, "Direct modulation of InGaAsP/InP double heterostructure lasers", Electron. Lett., Vol.14, No.6, pp.197-198, Mar. 16, 1978.
- [78CHI] N. Chinone, K. Aiki, M. Nakamura and R. Ito, "Effect of lateral mode and carrier density profile on dynamic behaviours of semiconductor lasers", IEEE J. Quantum Electron., Vol.QE-14, No.8, pp.625-631, Aug. 1978.

- [78COP] J. A. Copeland, A. G. Dentai and T. P. Lee, "p-n-p-n optical detectors and light-emitting diodes", IEEE J. Quantum Electron., Vol.QE-41, No.11, pp.810-813, Nov. 1978.
- [78DAI] U. Daido, "The estimated coupling efficiency of a light emitting diode with large-core high N. A. fibers", Fujitsu Sci. Tech. J., Vol.14, No.3, pp.25-36, Sept. 1978.
- [78DUP] R. D. Dupuis and P. D. Dapkus, "Room-temperature operation of distributed-Bragg-confinement $\text{Ga}_{1-x}\text{Al}_x\text{As-GaAs}$ lasers grown by metalorganic chemical vapor deposition", Appl. Phys. Lett., Vol.33, No.1, pp.68-69, July 1978.
- [78EVE] M. Eve, "Multipath time dispersion of an optical network", Opt. & Quantum Electron., Vol.10, No.1, pp.41-51, Jan. 1978.
- [78FEI] M. D. Feit and J. A. Fleck Jr., "Light propagation in graded-index optical fibers", Appl. Opt., Vol.17, No.24, pp.3990-3998, Dec. 1978.
- [78FURa] K. Furuya, T. C. Chong and Y. Suematsu, "Low-loss splicing of single-mode fibers by tapered-butt-joint method", Trans. IECE Japan, Vol.61-E, No.12, pp.957-961, Dec. 1978.
- [78FURb] K. Furuya, Y. Suematsu and T. Hong, "Reduction of resonance-like peak in direct-modulation due to carrier diffusion in injection laser", Appl. Opt., Vol.17, No.12, pp.1949-1952, June 1978.
- [78GAM] W. A. Gambling and H. Matsumura, "Propagation in radially-homogeneous single-mode fibers", Opt. & Quantum Electron., Vol.10, No.1, pp.31-40, Jan. 1978.
- [78HAT] I. Hatakeyama and H. Tsuchiya, "Fusion splices for single-mode optical fibers", IEEE J. Quantum Electron., Vol.QE-14, No.8, pp.614-619, Aug. 1978.
- [78HIL] K. O. Hill, Y. Fujii, D. C. Johnson and B. S. Kawasaki, "Photosensitivity in optical fiber waveguide: Applications to reflective filter fabrication", Appl. Phys. Lett., Vol.32, pp.647-649, May 1978.
- [78HOR] S. Horiuchi et al., "A Monolithic linear array of high-radiance AlGaAs double heterostructure LED's with selfaligned spherical lenses", Proc. IEEE, Vol.66, No.2, pp.261-263, Feb. 1978.
- [78IGA] K. Iga and Y. Takahashi, "Analysis on single wavelength oscillation of semiconductor laser at high speed pulse modulation", Trans. IECE Japan, Vol.61-E, No.9, pp.685-689, Sept. 1978.
- [78ISH] S. Ishikawa, K. Furuya and Y. Suematsu, "Vector wave analysis of broadband multimode optical fibers with optimum refractive index distribution", J. Opt. Soc. Am., Vol.68, No.5, pp.577-583, May 1978.
- [78ITO] T. Ito, K. Nakagawa, K. Aida, K. Takemoto and K. Sato, "Non repeated 50 km transmission experiment using low-loss optical fibers", Electron. Lett., Vol.14, No.16, pp.120-121, Aug. 3, 1978.
- [78KAT] Y. Katsuyama, Y. Mitsunaga, S. Mochizuki, A. Kawana, K. Ishihara and H. Tsuchiya, Papers on Technical Group Meeting of IECE Japan, Vol.OQE-378-43, 1978.
- [78KAWa] A. Kawana, M. Kawachi, T. Miyashita, M. Saruwatari, K. Asatani, J. Yamada and K. Oe, "Pulse broadening in long-span single mode fibers around a material-dispersion-free wavelength", Opt. Lett., Vol.2, No.4, pp.106-108, Apr. 1978.
- [78KAWb] H. Kawanishi, Y. Suematsu, Y. Itaya and S. Arai, " $\text{Ga}_{1-x}\text{In}_x\text{As}_y\text{P}_{1-y}/\text{InP}$ injection laser partially loaded with distributed Bragg reflectors", Jpn. J. Appl. Phys., Vol.17, No.8, pp.1439-1440, Aug. 1978.
- [78KOB] T. Kobayashi, K. Wakita, T. Kawakami, G. Iwane, Y. Horikoshi, Y. Seki and Y. Furukawa, "Accelerated life test of AlGaAs-GaAs DH lasers", Trans. IECE Japan, Vol.61-E, No.3, p.132, Mar. 1978.
- [78KUR] T. Kuroda, S. Yamashita, M. Nakamura and J. Umeda, "Channeled-substrate-planar structure distributed-feedback semiconductor lasers", Appl. Phys. Lett., Vol. 33, No. 2, pp.173-174, July 15, 1978.
- [78MIK] T. Miki and H. Ishio, "Viabilities of the wavelength-division-multiplexing transmission system over

- an optical fiber cable”, IEEE Trans. Commun., Vol.COM-26, pp.1082-1087, July 1978.
- [78MIL] B. I. Miller, J. H. McFee, R. J. Martin and P. K. Tien, “Room-temperature operation of lattice-matched $\text{InP}/\text{Ga}_{0.47}\text{In}_{0.53}\text{As}/\text{InP}$ double-heterostructure lasers grown by MBE”, Appl. Phys. Lett., Vol.33, No.1, pp.44-47, July 1978.
 - [78MIN] K. Minemura, K. Kobayashi, T. Yanase, R. Ishikawa, M. Shikada, A. Ueki and S. Sugimoto, “Two-way transmission experiments over a single optical fibre at the same wavelength using micro-optic 3 dB couplers”, Electron. Lett., Vol.14, No.11, pp.340-342, May 25, 1978.
 - [78NAH] R. E. Nahory and M. A. Pollack, “Threshold dependence on active layer thickness in $\text{InGaAsP}/\text{InP}$ DH lasers”, Electron. Lett., Vol.14, No.11, pp.727-729, Nov. 1978.
 - [78NAW] K. Nawata, S. Machida and T. Ito, “An 800 Mb/s optical transmission experiment using a single-mode-fiber”, IEEE J. Quantum Electron., Vol.QE-14, No.2, pp.98-103, Feb. 1978.
 - [78PAP] M. Papuchon and C. Puech, “Integrated optics : a possible solution for the fiber gyroscope”, Proc. Soc. Photo-Opt. Instrum. Eng., Vol.157, pp.218-219, 1978.
 - [78POL] M. A. Pollack, R. E. Nahory, J. C. DeWinter and A. A. Ballman, “Liquid phase epitaxial $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}$ lattice matched to (100) InP over the complete wavelength range $0.92 < \lambda < 1.65 \mu\text{m}$ ”, Appl. Phys. Lett., Vol.33, No.4, pp.314-316, Aug. 1978.
 - [78SAR] M. Saruwatari, K. Asatani, J. Yamada, I. Hatakeyama, K. Sugiyama and T. Kimura, “Low loss fiber transmission of high speed pulse at $1.29 \mu\text{m}$ wavelength”, Electron. Lett., Vol.14, No.6, pp.187-189, Mar. 16, 1978.
 - [78SAU] P. Saunier, C. S. Tsai, I. W. Yao and Le. T. Nguyen, “Electrooptic phased-array light beam deflector with application to analog-to-digital conversion”, presented at the Topical Meeting on Integrated and Guided Wave Optics, Washington, D. C., TuC2, 1978.
 - [78SCI] D. F. Scifres, W. Streifer and R. D. Burnham, “Beam scanning with twin-stripe injection lasers”, Appl. Phys. Lett., Vol.33, No.8, p.702, Oct. 1978.
 - [78STOa] H. M. Stoll, “Distributed Bragg deflector : a multifunctional integrated optical device”, Appl. Opt., Vol.17, No.16, p.2562, Aug. 1978.
 - [78STOb] R. H. Stolen, V. Ramaswamy, P. Kaiser and W. Pleibel, “Linear polarization in birefringent single-mode fibers”, Appl. Phys. Lett., Vol.33, No.8, pp.699-701, Oct. 1978.
 - [78SUE] Y. Suematsu and H. Tokiwa, “Transmission characteristics of mode-coupled graded index multimode optical fibers”, Trans. IECE Japan, Vol.61-E, No.5, pp.355-362, May 1978.
 - [78TOMa] L. R. Tomasetta et al., “Room-temperature C. W. operation of $\text{InP}/\text{InGaAsP}/\text{InP}$ double heterostructure diode lasers emitting at $1.55 \mu\text{m}$ ”, IEEE International Semiconductor Laser Conf., D2, San Francisco, 1978.
 - [78TOMb] W. J. Tomlinson and C. Lin, “Optical wavelength-division multiplexer for the $1\text{-}1.4 \mu\text{m}$ spectral region”, Electron. Lett., Vol.14, No.11, pp.345-347, May 25, 1978.
 - [78YAMa] J. Yamada, M. Saruwatari, K. Asatani, H. Tsuchiya, A. Kawana, K. Sugiyama and T. Kimura, “High-speed optical pulse transmission at $1.59 \mu\text{m}$ wavelength using low loss single-mode fibers”, IEEE J. Quantum Electron., Vol.QE-14, No.11, pp.791-800, Nov. 1978.
 - [78YAMb] T. Yamamoto, K. Sakai, S. Akiba and Y. Suematsu, “ $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}/\text{InP}$ DH lasers fabricated on InP (100) substrates”, IEEE J. Quantum Electron., Vol.QE-14, No.2, pp.95-98, Feb. 1978.
 - [79AKI] S. Akiba, K. Sakai, Y. Matsushima and T. Yamamoto, “Room-temperature C.W. operation of $\text{InGaAsP}/\text{InP}$ heterostructure lasers emitting at $1.56 \mu\text{m}$ ”, Electron. Lett., Vol.15, No.9, pp.606-607, Sept. 1979.

- [79ALF] R. C. Alferness, "Polarization-independent optical directional coupler switch using weighted coupling", Appl. Phys. Lett., Vol.35, No.10, pp.748-750, Nov. 1979.
- [79ARAA] S. Arai, M. Asada, Y. Suematsu and Y. Itaya, "Room temperature CW operation GaInAsP/InP DH laser emitting at $1.51\ \mu\text{m}$ ", Jpn. J. Appl. Phys., Vol.18, No.12, pp.2333-2334, Dec. 1979.
- [79ARAb] S. Arai, Y. Suematsu and Y. Itaya, " $1.6\ \mu\text{m}$ Ga_{0.47}In_{0.53}As/InP DH lasers double cladded with InP by LPE technique", Jpn. J. Appl. Phys., Vol.18, No.3, pp.709-710, Mar. 1979.
- [79BUL] C. H. Bulmer, W. K. Burns and T. G. Giallorenzi, "Performance criteria and limitations of electrooptic waveguide array deflectors", Appl. Opt., Vol.18, No.19, p.3282, Oct. 1979.
- [79CHAA] C. T. Chang, "Minimum dispersion in a single-mode step-index optical fiber", Appl. Opt., Vol.18, No.7, pp.2516-2522, July 1979.
- [79CHAb] C. T. Chang, "Minimum dispersion at $1.55\ \mu\text{m}$ for single-mode step-index fibers", Electron. Lett., Vol.15, No.23, pp.765-767, Nov. 1979.
- [79CHI] K. Chida, F. Hanawa, M. Nakahara and N. Inagaki, "Simultaneous dehydration with consolidation for VAD method", Electron. Lett., Vol.15, No.25, pp.835-836, Dec. 1979.
- [79COH] L. G. Cohen, C. Lin and W. G. French, "Tailoring zero chromatic dispersion into the $1.5\text{-}1.6\ \mu\text{m}$ low loss spectral region of single mode fibers", Electron. Lett., Vol.15, No.12, pp.334-335, June 1979.
- [79DAI] B. Daino, G. de Marchis and S. Piazzola, "Analysis and measurement of modal noise in an optical fiber", Electron. Lett., Vol.15, No.23, pp.755-756, Nov. 1979.
- [79DOIA] A. Doi, N. Chinone, K. Aiki and R. Ito, "Ga_xIn_{1-x}As_yP_{1-y}/InP rib waveguide injection lasers made by one-step LPE", Appl. Phys. Lett., Vol.34, No.6, pp.393-395, Mar. 1979.
- [79DOIB] A. Doi, T. Fukuzawa, M. Nakamura, R. Ito and K. Aiki, "InGaAsP/InP distributed feedback injection lasers fabricated by one-step liquid phase epitaxy", Appl. Phys. Lett., Vol.35, pp.441-443, Sept. 1979.
- [79ELL] R. A. Elliott and J. B. Shaw, "Electrooptic streak camera : theoretical analysis", Appl. Opt., Vol.18, No.7, p.1025, Apr. 1979.
- [79FUJ] Y. Fuji, J. Minowa, T. Aoyama and K. Doi, "Low-loss 4×4 optical matrix switch for fibre-optic communication", Electron. Lett., Vol.15, No.14, pp.427-428, July 1979.
- [79FURa] K. Furuya, M. Miyamoto and Y. Suematsu, "Bandwidth of single mode optical fibers", Trans. IECE Japan, Vol.62-E, No.5, pp.305-310, May 1979.
- [79FURb] K. Furuya, Y. Suematsu and S. Sugou, "Integrated optical branching filter consisting of three-dimensional waveguide and its non-radiative condition", IEEE Trans. Circuits & Syst., Vol.CAS-26, No.12, pp.1049-1054, Dec. 1979.
- [79GAM] W. A. Gambling, H. Matsumura and C. M. Ragdale, "Zero total dispersion in graded-index single-mode fibers", Electron. Lett., Vol.15, No.15, pp.474-476, July 1979.
- [79GOO] R. C. Goodfellow, A. C. Carter, I. Griffith and R. R. Bradley, "GaInAsP/InP fast, high-radiance, $1.05\text{-}1.3\ \mu\text{m}$ wavelength LEDs with efficient lens coupling to small numerical aperture silica optical fibres", IEEE Trans. Electron Devices, Vol.ED-26, No.8, pp.1215-1220, Aug. 1979.
- [79HAG] H. E. Hagemeier and S. R. Robinson, "Field properties of multiple coherently combined lasers", Appl. Opt., Vol.18, No.3, p.270, Feb. 1979.
- [79HON] T. Hong and Y. Suematsu, "Harmonic distortion in direct modulation of injection lasers", Trans. IECE Japan, Vol.62-E, No.3, pp.142-147, Mar. 1979.
- [79HORa] Y. Horikoshi and Y. Furukawa, "Temperature sensitive threshold current of InGaAsP-InP double heterostructure lasers", Jpn. J. Appl. Phys., Vol.18, No.4, pp.809-815, Apr. 1979.
- [79HORb] Y. Horikoshi, T. Kobayashi and Y. Furukawa, "Lifetime of InGaAsP-InP and AlGaAs-GaAs DH lasers

- estimated by the point defect generation model”, Jpn. J. Appl. Phys., Vol.18, No.12, pp.2237-2244, Dec. 1979.
- [79HUG] J. L. Hughsar and A. K. Ghatak, “Phased-array optical scanning”, Appl. Opt., Vol.18, No.13, p.2098, July 1979.
- [79ITA] Y. Itaya, Y. Suematsu, S. Katayama, K. Kishino and S. Arai, “Low-threshold current density (100) GaInAsP/InP double-heterostructure lasers for wavelength 1.3 μm ”, Jpn. J. Appl. Phys., Vol.18, No.9, pp.1795-1870, Sept. 1979.
- [79IZA] T. Izawa, S. Sudo and F. Hanawa, “Continuous fabrication process for high-silica fiber preforms”, Trans. IECE Japan, Vol.62-E, No.11, pp.779-785, Nov. 1979.
- [79KAW] H. Kawaguchi, T. Takahei, Y. Toyoshima, H. Nagai and G. Iwane, “Room-temperature C.W. Operation of InP/InGaAsP/InP double heterostructure diode lasers emitting at 1.55 μm ”, Electron. Lett., Vol.15, No.21, pp.669-700, Oct. 1979.
- [79LEE] J. K. Lee, “Piezoelectric bimorph optical beam scanners : analysis and construction”, Appl. Opt., Vol.18, No.4, p.455, Feb. 1979.
- [79MIL] S. E. Miller and A. G. Chynoweth ed., “Optical fiber telecommunications”, Academic Press, New York, 1979.
- [79MIY] T. Miya, Y. Terunuma, T. Hosaka and T. Miyashita, “An ultimately low-loss single-mode fiber at 1.55 μm ”, Electron. Lett., Vol.15, No.4, pp.106-108, Feb. 1979.
- [79NAH] R. E. Nahory, M. A. Pollack and J. C. DeWinter, “Temperature dependence of InGaAsP double-heterostructure laser characteristics”, Electron. Lett., Vol.15, No.21, pp.695-696, Oct. 1979.
- [79NIS] H. Nishi, M. Yano, Y. Nishitani, Y. Akita and M. Takusagawa, “Self-aligned structure InGaAsP/InP DH lasers”, Appl. Phys. Lett., Vol.35, No.3, pp.232-234, Aug. 1979.
- [79OHT] K. Ohtaka, “Energy band of photons and low-energy photon diffraction”, Phys. Rev. B, Vol.19, pp.5057-5065, 1979.
- [79OKA] K. Okamoto, T. Edahiro, A. Kawana and T. Miya, “Dispersion minimization in single-mode fibers over a wide spectral range”, Electron. Lett., Vol.15, No.22, pp.729-731, Oct. 1979.
- [79OLS] R. Olshansky and G. Scherer, “High GeO₂ optical waveguides”, Conference Proceedings European Conference on Optical Communication, Amsterdam, pp.12.5-1 ~ 12.5-3, Sept. 1979.
- [79PRE] H. M. Presby and D. Marcuse, “Preform index profiling”, Appl. Opt., Vol.18, No.5, pp.671-677, Mar. 1979.
- [79SAKa] J. Sakai and T. Kimura, “Practical microbending loss formula for single-mode optical fibers”, IEEE J. Quantum Electron., Vol.QE-15, No.6, pp.497-500, June 1979.
- [79SAKb] Y. Sakakibara, K. Furuya, Y. Suematsu and Y. Itaya, “Direct modulation characteristics of GaInAsP/InP D. H. lasers with various stripe widths measured by sharp-pulse method”, Electron. Lett., Vol.15, No.9, pp.594-596, Sept. 1979.
- [79SEA] C. Seakeng and P. L. Chu, “Nondestructive determination of refractive index profile of an optical fiber : backward light scattering method”, Appl. Opt., Vol.18, No.7, pp.1110-1115, Apr. 1979.
- [79SHI] S. Shimada, T. Matsumoto, T. Ito, S. Matsushita, K. Washio and K. Minemura, “100 km optical-fiber transmission system at 1.32 μm using high-power C. W. Nd-YAG laser”, Electron. Lett., Vol.15, No.16, pp.484-486, Aug. 2, 1979.
- [79SNY] A. W. Snyder and R. A. Sammut, “Fundamental (HE₁₁) modes of graded optical fibers”, J. Opt. Soc. Am., Vol.69, No.1, pp.1663-1671, Dec. 1979.
- [79SOD] H. Soda, K. Iga, C. Kitahara and Y. Suematsu, “GaInAsP/InP surface emitting injection lasers”, Jpn. J.

- Appl. Phys., Vol.18, pp.2329-2330, 1979.
- [79TAK] T. Tako, T. Takakura and K. Iga, "Interferometric measurements of linewidth and frequency stability of a single longitudinal-mode $\text{Al}_x\text{Ga}_{1-x}\text{As}$ laser", J. Opt. Soc. Am., Vol.69, No.10, p.1482, Oct. 1979.
 - [79TSUa] H. Tsuchiya and N. Imoto, "Dispersion-free single-mode fiber in 1.5 μm wavelength region", Electron. Lett., Vol.15, No.15, pp.476-478, July 19, 1979.
 - [79TSUb] H. Tsuchiya and N. Imoto, "Single mode fiber delay equalization and baseband response", IECE Japan, Eng. Res. Rep., Vol.OQE79-22, May 1979.
 - [79UEM] Y. Uematsu, T. Ozeki and Y. Unno, "Efficient power coupling between an MH LED and a tapered multimode fiber", IEEE J. Quantum Electron., Vol.QE-15, No.2, pp.86-92, Feb. 1979.
 - [79ULR] R. Ulrich, "Polarization stabilization on single-mode fiber", Appl. Phys. Lett., Vol.35, No.11, pp.840-842, Dec. 1979.
 - [79URY] I. Ury, S. Margalit, M. Yust and A. Yariv, "Monolithic integration of an injection laser and a metal semiconductor field effect transistor", Appl. Phys. Lett., Vol.34, No.7, pp.430-431, Apr. 1979.
 - [79WHI] K. I. White and B. P. Nelson, "Zero total dispersion in step-index monomode fibers at 1.30 and 1.55 μm ", Electron. Lett., Vol.15, No.13, pp.396-397, June 1979.
 - [79YAMa] J. Yamada, S. Machida, T. Kimura and H. Takata, "Dispersion-free single-mode transmission experiments up to 1.6 Gbit/s", Electron. Lett., Vol.15, No.10, pp.278-279, May 10, 1979.
 - [79YAMb] M. Yamada and Y. Suematsu, "A condition of single longitudinal mode operation in injection lasers with index guiding structures", IEEE J. Quantum Electron., Vol.QE-15, No.8, pp.743-749, Aug. 1979.
 - [79YAMc] T. Yamamoto, K. Sakai and S. Akiba, "10000 h continuous CW operation of $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}/\text{InP}$ DH lasers at room temperature", IEEE J. Quantum Electron., Vol.QE-15, No.8, pp.684-687, Aug. 1979.
 - [79YAO] S. K. Yao, D. Weid and R. M. Montgomery, "Guided acoustic traveling wave lens for high-speed optical scanners", Appl. Opt., Vol.18, No.4, p.446, Feb. 1979.
 - [80ADA] A. R. Adams, M. Asada, Y. Suematsu and S. Arai, "The temperature dependence of the efficiency and threshold current of $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}$ lasers related to intervalence band absorption", Jpn. J. Appl. Phys., Vol.19, No.10, pp.L621-L624, Oct. 1980.
 - [80ARA] S. Arai, Y. Suematsu and Y. Itaya, "1.11-1.67 μm (100) GaInAsP/InP injection lasers prepared by liquid phase epitaxy", IEEE J. Quantum Electron., Vol.QE-16, No.2, pp.197-205, Feb. 1980.
 - [80BAR] M. K. Barnoski, "Fiber systems for the military environment", Proc. IEEE, Vol.68, No.10, pp.1315-1320, Oct. 1980.
 - [80BEA] K. J. Beales, C. R. Day, A. G. Dunn and S. Partington, "Multicomponent glass fibers for optical communications", Proc. IEEE, Vol.68, No.10, pp.1191-1194, Oct. 1980.
 - [80CAP] F. Capasso, R. A. Logan, A. Hutchinson and D. D. Manchon, "InGaAsP/InGaAs heterojunction p-i-n detectors with low dark current and small capacitance for 1.3-1.6 μm fiber optic systems", Electron. Lett., Vol.16, No.23, pp.893-895, Nov. 1980.
 - [80COH] L. G. Cohen, P. Kaiser and C. Lin, "Experimental techniques for evaluation of fiber transmission loss and dispersion", Proc. IEEE, Vol.68, No.10, pp.1203-1209, Oct. 1980.
 - [80FUK] T. Fukuzawa, H. Matsuda, T. Kuroda and M. Nakamura, "Integration of GaAs FET and a laser diode (I)", National Convention Record of Appl. Phys., 19-Q-7, 1980.
 - [80FUR] K. Furuya and Y. Suematsu, "Random-bend loss in single-mode and parabolic-index multimode optical fiber cables", Appl. Opt., Vol.19, No.9, pp.1493-1500, May 1980.
 - [80HAN] F. Hanawa, S. Sudo, M. Kawachi and M. Nakahara, "Fabrication of completely OH-free V. A. D. fiber", Electron. Lett., Vol.16, No.18, pp.699-700, Aug. 28, 1980.

- [80HIR] J. P. Hirtz, J. P. Duchemin, P. Hirtz, B. de Cremoux, T. Pearsall and M. Bonnet, " $\text{Ga}_x\text{In}_{1-x}\text{As}_y\text{P}_{1-y}/\text{InP}$ D. H. laser emitting at $1.15\ \mu\text{m}$ grown by low-pressure metalorganic C.V.D.", Electron. Lett., Vol.16, No.8, pp.275-277, Apr. 1980.
- [80HSI] J. J. Hsieh, "High-temperature CW operation of $\text{GaInAsP}/\text{InP}$ lasers emitting at $1.5\ \mu\text{m}$ ", Appl. Phys. Lett., Vol.37, No.1, pp.25-27, July 1980.
- [80IGA] K. Iga and B. I. Miller, "C.W. operation of $\text{GaInAsP}/\text{InP}$ laser with chemically etched mirror", Electron. Lett., Vol.16, No.22, pp.830-831, Oct. 1980.
- [80ITA] Y. Itaya, T. Tanbun-ek, K. Kishino, S. Arai and Y. Suematsu, " $1.6\ \mu\text{m}$ wavelength buried heterostructure $\text{GaInAsP}/\text{InP}$ Lasers", Jpn. J. Appl. Phys., Vol.19, No.3, pp.L141-L144, Mar. 1980.
- [80IZA] T. Izawa and N. Inagaki, "Materials and processes for fiber preform fabrication-vapor-phase axial deposition", Proc. IEEE, Vol.68, No.10, pp.1184-1187, Oct. 1980.
- [80KOBa] S. Kobayashi and T. Kimura, "Gain and saturation power of resonant AlGaAs laser amplifier", Electron. Lett., Vol.16, No.6, pp.230-232, Mar. 1980.
- [80KOBb] K. Kobayashi and M. Seki, "Microoptic grating multiplexers and optical isolators for fiber-optic communications", IEEE J. Quantum Electron., Vol.QE-16, No.1, pp.11-22, Jan. 1980.
- [80KOBc] K. Kobayashi, S. Matsushita, M. Seki, Y. Odagiri, I. Mito and M. Sugimoto, "Stabilized $1.3\ \mu\text{m}$ laser diode-isolator module for a hybrid optical integrated circuit", Top. Meet. Integrated and Guided-Wave Opt., MD5, Lake Tahoe, Jan. 1980.
- [80KOKa] Y. Kokubun and K. Iga, "Refractive index profile measurement of preform rods by a transverse differential interferogram", Appl. Opt., Vol.19, No.6, p.846, Mar. 1980.
- [80KOKb] Y. Kokubun and K. Iga, "Formulas for TE_{01} cutoff in optical fibers with arbitrary index profile", J. Opt. Soc. Am., Vol.70, No.1, pp.36-40, Jan. 1980.
- [80KUBa] K. Kubota, J. Noda and O. Mikami, "Traveling wave optical modulator using a directional coupler LiNbO_3 waveguide", IEEE J. Quantum Electron., Vol.QE-16, No.7, pp.754-760, July 1980.
- [80KUBb] M. Kubota, K. Furuya and Y. Suematsu, "Random-bend loss-evaluation in single-mode optical fiber with various index profiles", Trans. IECE Japan, Vol.63-E, No.10, pp.723-730, Oct. 1980.
- [80LEH] R. F. Leheny, R. E. Nahory, M. A. Pollack and E. D. Beebe, " $\text{In}_{0.53}\text{Ga}_{0.47}\text{AsPIN}$ -FET photo-receiver for 1.0 - $1.7\ \mu\text{m}$ wavelength fiber optic systems", in Tech. Dig. Integrated and Guided Wave Optics Meet. (Incline Village, NV), Paper WC4, Jan. 1980.
- [80LIN] C. Lin and H. Kogelnik, "Optical-pulse equalization of low-dispersion transmission in single-mode fibers in the 1.3 - $1.7\ \mu\text{m}$ spectral region", Opt. Lett., Vol.5, No.11, pp.476-478, Nov. 1980.
- [80LI] T. Li, "Structures, parameters, and transmission properties of optical fibers", Proc. IEEE, Vol.68, No.10, pp.1175-1180, Oct. 1980.
- [80MAC] J. B. MacChesney, "Materials and processes for preform fabrication-modified chemical vapor deposition and plasma chemical vapor deposition", Proc. IEEE, Vol.68, No.10, pp.1181-1184, Oct. 1980.
- [80MAT] H. Matsumura, T. Katsuyama and T. Suganuma, "Fundamental study of single polarization fibers", in Proc. 6th European Conf. Opt. Comm., York, England, pp.49-52, Sept. 1980.
- [80MEL] H. Melchior, "Noise in semiconductor laser", Top. Meet. Integrated and Guided-Wave Opt., MA2, Lake Tahoe, Calif., Jan. 1980.
- [80MIK] T. Miki and J. Yamagata, "Public telecommunication - Trunk transmission systems and subscriber loops", J. IECE Japan, Vol.63, No.11, pp.1114-1123, Nov. 1980.
- [80MIY] T. Miya, A. Kawana, Y. Terunuma and T. Hosaka, "Fabrication of single-mode fiber for $1.5\ \mu\text{m}$

- wavelength region”, Trans. IECE Japan, Vol.63-E, No.7, pp.514-519, July 1980.
- [80MIZ] K. Mizuishi, M. Hirao, S. Tsuji, H. Sato and M. Nakamura, “Accelerated aging characteristics of InGaAsP/InP buried hetero-structure lasers emitting at $1.3\ \mu\text{m}$ ”, Jpn. J. Appl. Phys., Vol.19, No.7, pp.L429-L437, July 1980.
- [80MOR] T. Moriyama, O. Fukuda, K. Sanada, K. Inada, T. Edahiro and K. Chida, “Ultimately low OH content VAD optical fibers”, Electron. Lett., Vol.16, No.8, pp.698-699, Aug. 1980.
- [80MUR] T. Murotani, E. Oomura, H. Higuchi, H. Namizaki and W. Susaki, “InGaAsP/InP buried crescent laser emitting at $1.3\ \mu\text{m}$ with very low threshold current”, Electron. Lett., Vol.16, No.14, pp.566-568, July 1980.
- [80NAG] H. Nagai, Y. Noguchi, K. Takahei, Y. Toyoshima and G. Iwane, “InP/GaInAsP buried heterostructure lasers of $1.5\ \mu\text{m}$ region”, Jpn. J. Appl. Phys., Vol.19, No.4, pp.L218-L220, Apr. 1980.
- [80NAKa] T. Nakahara and N. Uchida, “Optical cable design and characterization in Japan”, Proc. IEEE, Vol.68, No.10, pp.1220-1226, Oct. 1980.
- [80NAKb] M. Nakahara, S. Sudo, N. Inagaki, K. Yoshida, S. Shibuya, K. Kokura and T. Kuroha, “Ultra wide bandwidth VAD Fiber”, Electron. Lett., Vol.16, No.10, pp.391-392, May 1980.
- [80NEL] R. J. Nelson, P. D. Wright, P. A. Barnes, R. L. Brown, T. Cella and R. G. Sobers, “High-output power InGaAsP ($\lambda = 1.3\ \mu\text{m}$) strip-buried heterostructure lasers”, Appl. Phys. Lett., Vol.36, No.5, pp.358-360, Mar. 1980.
- [80NOM] Y. Nomura and T. Nakai, “Public telecommunication-Undersea transmissin systems”, J. IECE Japan, Vol.63, No.11, pp.1123-1129, Nov. 1980.
- [80PRE] H. M. Presby and D. Marcuse, “The index-profile characterization of fiber preforms and drawn fibers”, Proc. IEEE, Vol.68, No.10, pp.1198-1203, Oct. 1980.
- [80RAW] E. G. Rawson, J. W. Goodman and R. E. Norton, “Experimental and analytical study of modal noise in optical fibers”, 6th European Conference on Optical Communications, pp.72-75, Sept. 16-19, 1980.
- [80REI] F. K. Reinhart and R. A. Logan, “Electrooptic frequency and polarization modulated injection lasers”, Appl. Phys. Lett., Vol.36, pp.954-957, June 1980.
- [80SAK] Y. Sakakibara, K. Furuya, K. Utaka and Y. Suematsu, “Single-mode oscillation under high speed direct modulation in GaInAsP/InP integrated twin-guide lasers with distributed-Bragg reflectors”, Electron. Lett., Vol.16, No.12, pp.456-458, June 1980.
- [80SAS] I. Sasaki, D. N. Payne and M. J. Adams, “Measurement of refractive-index profiles in optical-fiber preforms by spatial-filtering technique”, Electron. Lett., Vol.16, No.6, pp.219-221, Mar. 1980.
- [80SCH] M. I. Schwartz, P. F. Gagen and M. R. Santana, “Fiber cable design and characterization”, Proc. IEEE, Vol.68, No.10, pp.1214-1219, Oct. 1980.
- [80SIG] G. H. Sigel, Jr., “Fiber transmission losses in high-radiation fields”, Proc. IEEE, Vol.68, No.10, pp.1236-1240, Oct. 1980.
- [80SPEa] “Special Issue of Optical Communications”, J. Inst. Electron. & Commun. Eng., Japan, Vol.63, Nov. 11, 1980.
- [80SPEb] “Special Issue of Optical Fiber Communications”, Proc. IEEE, Vol.68, Oct. 10, 1980.
- [80STU] K. E. Stubkjaer and M. Danielsen, “Nonlinearity of GaAlAs laser-harmonic distortion”, IEEE J. Quantum Electron., Vol.QE-16, No.5, pp.531-537, May 1980.
- [80SUE] Y. Suematsu, IEEE International Semiconductor Laser Conference, Brighton, 1980.
- [80TSU] Tsuken Geppo (Monthly Record of ECL NTT), Vol.33, No.12, pp.1-6, Dec. 1980.
- [80UTAA] K. Utaka, K. Kobayashi, K. Kishino and Y. Suematsu, “ $1.5\text{-}1.6\ \mu\text{m}$ GaInAsP/InP integrated twin-

- guide lasers with first-order distributed Bragg reflectors”, *Electron. Lett.*, Vol.16, No.12, pp.455-456, June 1980.
- [80UTAb] K. Utaka, Y. Suematsu, K. Kobayashi and H. Kawanishi, “GaInAsP/InP integrated twin-guide lasers with first-order distributed Bragg reflectors at 1.3 μm wavelength”, *Jpn. J. Appl. Phys.*, Vol.19, No.2, pp.L137-L140, Feb. 1980.
- [80YAMa] H. Yamamoto, M. Yokoyama, H. Ogawara and M. Yoshida, “Large-scale and low-loss optical switch matrix for optical switching systems”, *Opt. Commun.*, Vol.1, No.2, pp.74-79, Nov. 1980.
- [80YAMb] N. Yamamoto and K. Iga, “Evaluation of gradient-index rod lenses by imaging”, *Appl. Opt.*, Vol.19, No.7, pp.1101-1104, Apr. 1, 1980.
- [80YAN] N. Yano, H. Nishi and M. Tagusagawa, “Temperature characteristics of threshold current in InGaAsP/InP heterostructure lasers”, *J. Appl. Phys.*, Vol.51, No.8, pp.4022-4028, Aug. 1980.
- [81ABE] Y. Abe, K. Kishino, Y. Suematsu and S. Arai, “GaInAsP/InP integrated laser with butt-jointed built-in distributed-Bragg-reflection waveguide”, *Electron. Lett.*, Vol.17, No.25, pp.945-947, Dec. 1981.
- [81ALF] R. C. Alferness, “Guided-wave devices for optical communication”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.6, pp.946-958, June 1981.
- [81AOYa] K. Aoyama, K. Nakagawa and T. Itoh, “Optical time domain reflectometry in a single-mode fiber”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.6, pp.862-868, June 1981.
- [81AOYb] T. Aoyama, K. Doi, H. Uchida, T. Hibiya, K. Matsumi and Y. Ohta, “A low cost compact optical isolator using a thick Gd : YIG film growing liquid phase epitaxy”, 7th ECOC, Section 8-2, Copenhagen, Sept. 1981.
- [81ARA] S. Arai, M. Asada, T. Tanbun-ek, Y. Suematsu, Y. Itaya and K. Kishino, “1.6 μm wavelength GaInAsP/InP BH lasers”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.5, pp.640-645, May 1981.
- [81ASA] M. Asada, A. R. Adams, K. Stubkjaer, Y. Suematsu and S. Arai, “The temperature dependence of the threshold current of GaInAsP/InP DH lasers”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.6, pp.611-619, May 1981.
- [81HAR] E. H. Hara, S. Machida, M. Ikeda, H. Kanbe and T. Kimura, “Optoelectronic broadband matrix switch”, IOOC '81, WK7, 1981.
- [81HIG] Y. Higo and M. Shimodaira, “Fiber optic line terminating equipment and transmission line repeaters”, *J. Inst. Electron. & Commun. Eng. Japan*, Vol.63, No.11, pp.1192-1200, Nov. 1981.
- [81HIR] O. Hirota, Y. Suematsu and K. S. Kwok, “Properties of intensity noise of laser diodes due to reflected waves from single-mode optical fiber and its reduction”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.7, pp.1014-1020, June 1981.
- [81HOSa] T. Hosaka, K. Okamoto, T. Miya, Y. Sasaki and T. Edahiro, “Low-loss single polarization fibers with asymmetrical strain birefringence”, *Electron. Lett.*, Vol.17, No.15, pp.530-531, July 1981.
- [81HOSb] T. Hosaka, K. Okamoto, Y. Sasaki and T. Edahiro, “Singlemode fibers with asymmetrical refractive index pits on both sides of core”, *Electron. Lett.*, Vol.17, No.5, pp.191-193, Mar. 1981.
- [81HSI] J. J. Hsieh, “Phase diagram for LPE growth of GaInAsP layers lattice matched to InP substrates”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.2, pp.118-122, Feb. 1981.
- [81IMA] H. Imai, M. Morimoto, H. Ishikawa, K. Hori and M. Takusagawa, “Accelerated aging test of InGaAsP/InP double-heterostructure laser diodes with single transverse mode”, *Appl. Phys. Lett.*, Vol.38, No.1, pp.16-17, Jan. 1981.
- [81IRV] J. Irvén, G. J. Cannell, K. C. Byron, A. P. Harrison R. Worthington and J. G. Lamb, “Single-mode fibers for submarine cable systems”, *IEEE J. Quantum Electron.*, Vol. QE-17, No.6, pp.907-910, June

- 1981.
- [81ITA] Y. Itaya, S. Arai, K. Kishino, M. Asada and Y. Suematsu, "1.6 μm wavelength GaInAsP/InP lasers prepared by two-phase solution technique", IEEE J. Quantum Electron., Vol.QE-17, No.5, pp.635-640, May 1981.
 - [81IWAa] E. Iwahashi, "First field trial of long-haul transmission systems using single-mode fiber cable at a 1.3 μm wavelength", IOOC '81, San Francisco, MC-4, Apr. 1981.
 - [81IWA b] E. Iwahashi, "Trends in long-wavelength single-mode transmission systems and demonstration in Japan", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.890-896, June 1981.
 - [81KAM] I. P. Kaminow, D. Marcuse and M. H. Presby, "Multimode fiber bandwidth : Theory and practice", Proc. IEEE, Vol.68, No.10, pp.1209-1213, Oct. 1981.
 - [81KAWa] H. Kawaguchi and K. Takahei, "Characteristics of 1.5 μm wavelength buried heterostructure lasers (II)", National Conv. IECE, Japan, 850, Apr. 1981.
 - [81KAWb] M. Kawachi, S. Tomaru, M. Yasu, M. Horiguchi, S. Sakaguchi and T. Kimura, "100 km single mode VAD fibers", Electron. Lett., Vol.17, No.2, pp.57-58, Jan. 1981.
 - [81KHO] G. D. Khoe, H. G. Kock, J. A. Luijendijk, C. H. J. van den Brekel and D. Kupperts, "Plasma CVD prepared $\text{SiO}_2/\text{Si}_3\text{N}_4$ gradient index lenses integrated in windows of laser diode packages", 7th ECOC, Section 7-6, Copenhagen, Sept. 1981.
 - [81KID] Y. Kidoh, Y. Suematsu and K. Furuya, "Polarization control on output of single-mode optical fibers", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.991-994, June 1981.
 - [81KIT] K. Kitayama, S. Seikai and N. Uchida, "Polarization-maintaining single-mode fiber with azimuthally inhomogeneous index profile", Electron. Lett., Vol.17, No.12, pp.419-420, June 1981.
 - [81KOB] K. Kobayashi, K. Utaka, Y. Abe and Y. Suematsu, "CW operation of 1.5-1.6 μm wavelength GaInAsP/InP buried-heterostructure integrated twin-guide laser with distributed Bragg reflector", Electron. Lett., Vol.17, No.11, pp.366-368, May 1981.
 - [81KOYa] F. Koyama, S. Arai, Y. Suematsu and K. Kishino, "Dynamic spectral width of rapidly modulated 1.58 μm GaInAsP/InP buried-heterostructure distributed-Bragg-reflector integrated-twin-guide lasers", Electron. Lett., Vol.17, No.25/26, pp.938-940, Dec. 1981.
 - [81KOYb] Y. Koyamada, S. Hatano, H. Shinohara and F. Nihei, "A study on high density optical cables with a great many fibers", I. W. C. S., Nov. 1981.
 - [81MAR] D. Marcuse and C. L. Lin, "Low dispersion single-mode fiber transmission-the question of practical versus theoretical maximum transmission bandwidth", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.869-878, June 1981.
 - [81MIK] O. Mikami, "1.55 μm GaInAsP/InP distributed feedback lasers", Jpn. J. Appl. Phys., Vol.20, No.7, pp.488-490, July 1981.
 - [81MIYa] T. Miya, A. Kawana, Y. Terunuma, T. Hosaka and Y. Ohmori, "Low loss zero-dispersion single-mode fibers in the 1.5 μm wavelength region", Trans. IECE Japan, Vol.64-E, No.1, pp.32-33, Jan. 1981.
 - [81MIYb] T. Miya, K. Okamoto, Y. Ohmori and Y. Sasaki, "Fabrication of low dispersion single-mode fibers over a wide spectral range", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.858-861, June 1981.
 - [81MUR] H. Murata and N. Inagaki, "Low-loss single-mode fiber development and splicing research in Japan", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.835-849, June 1981.
 - [81NAK] M. Nakamura and S. Tsuji, "Single-mode semiconductor injection lasers for optical fiber communications", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.994-1005, June 1981.
 - [81NIP] Nippon Denshin Denwa Kousya, Denki Tsushin Shisetsu, Vol.33, No.4, Apr. 1981.

- [81NOD] Y. Noda, K. Sakai, Y. Matsushima, "High temperature CW operation of 1.5 μm InGaAsP/InP buffer layer loaded planoconvex waveguide lasers", *Electron. Lett.*, Vol.17, No.6, pp.226-227, Mar. 1981.
- [81OIKa] M. Oikawa, K. Iga and T. Sanada, "A distributed-index planar micro-lens made of plastics", *Jpn. J. Appl. Phys.*, Vol.20, No.1, pp.L51-L54, Jan. 1981.
- [81OIKb] M. Oikawa, K. Iga, T. Sanada, N. Yamamoto and K. Nishizawa, "Array of distributed-index planar micro-lenses prepared from ion exchange technique", *Jpn. J. Appl. Phys.*, Vol.20, No.4, pp.L296-L298, Apr. 1981.
- [81OIKc] M. Oikawa, K. Iga and T. Sanada, "Distributed-index planar microlens array prepared from deep electromigration", *Electron. Lett.*, Vol.17, No.13, pp.452-453, June 1981.
- [81OKA] K. Okamoto, T. Eda Hiro and M. Nakahara, "Transmission characteristics of VAD multimode optical fibers", *Appl. Opt.*, Vol.20, No.13, pp.2314-2318, July 1, 1981.
- [81OKO] T. Okoshi, "Single-polarization single-mode optical fibers", *IEEE J. Quantum Electron.*, Vol.QE-17, No.6, pp.879-885, June 1981.
- [81OOM] E. Oomura, T. Murotani, H. Higuchi, H. Namizaki and W. Susaki, "Low threshold InGaAsP/InP buried crescent laser with double current confinement structure", *IEEE J. Quantum Electron.*, Vol. QE-17, No.5, pp.646-650, May 1981.
- [81PEA] T. P. Pearsall, "Photodetectors for optical communication", *J. Opt. Commun.*, Vol.2, No.6, pp.42-48, June 1981.
- [81SAI] S. Saito, Y. Yamamoto and T. Kimura, "Optical FSK heterodyne detection experiments using semiconductor laser transmitter and local oscillator", *IEEE J. Quantum Electron.*, Vol.QE-17, No.6, pp.935-941, June 1981.
- [81SAR] M. Saruwatari and T. Sugie, "Efficient laser diode to single-mode fiber coupling using a combination of two lenses in confocal condition", *IEEE J. Quantum Electron.*, Vol.QE-17, No.6, pp.1021-1027, June 1981.
- [81SCH] P. C. Schultz, "Fabrication of optical waveguides by the outside vapor deposition process", *Proc. IEEE*, Vol.68, No.10, pp.1187-1190, Oct. 1981.
- [81SEK] K. Seki, T. Kamiya and H. Yanai, "Effect of waveguiding properties on the axial mode competition in stripe-geometry semiconductor lasers", *IEEE J. Quantum Electron.*, Vol.QE-17, No.5, pp.706-714, May 1981.
- [81SHI] M. Shirasaki, H. Kuwahara and T. Obokata, "Compact polarization-independent optical circulator", *Appl. Opt.*, Vol.20, pp.2683-2687, 1981.
- [81STO] R. H. Stolen, "Nonlinearity in fiber transmission", *Proc. IEEE*, Vol.68, No.10, pp.1232-1236, Oct. 1981.
- [81SUEa] Y. Suematsu and K. Iga, "Integrated GaInAsP/InP laser", 1st European Conference on Integrated Optics, pp.70-75, Sep. 1981.
- [81SUEb] T. Sueta and M. Izutsu, "High-speed guided-wave optical components", IOOC '81, TuM2, San Francisco, Apr. 1981.
- [81SUG] A. Sugimura, "Band-to-band Auger recombination effect on InGaAsP laser threshold", *IEEE J. Quantum Electron.*, Vol.QE-17, No.5, pp.627-635, May 1981.
- [81TANa] T. Tanbun-ek, S. Arai, F. Koyama, K. Kishino, S. Yoshizawa, T. Watanabe and Y. Suematsu, "Low threshold current CW operation of GaInAsP/InP buried heterostructure distributed-Bragg-reflector integrated-twin-guide laser emitting at 1.5-1.6 μm ", *Electron. Lett.*, Vol.17, No.25/26, pp.967-968, Dec. 1981.

- [81TANb] T. Tanifuji and M. Tokuda, "Amplitude fluctuation in laser single transmitted through a long multimode fiber", IEEE J. Quantum Electron., Vol.QE-17, No.11, pp.2228-2233, Nov. 1981.
- [81TOD] Y. Toda, O. Watanabe, M. Ogai and S. Seikai, "Low-loss fusion splice of single mode fiber", Int. Conf. on Comm., Denver, Colorado, Con. Rec. 1 of 4, pp.27.7.1-27.7.6, June 14-18, 1981.
- [81UES] N. Uesugi and M. Ikeda, "Maximum single frequency input power in a long optical fibre determined by stimulated Brillouin scattering", Electron. Lett., Vol.17, No.11, pp.379-380, May 1981.
- [81UTAA] K. Utaka, K. Kobayashi and Y. Suematsu, "Lasing characteristics of $1.5 \sim 1.6 \mu\text{m}$ GaInAsP/InP integrated twin-guide lasers with first-order distributed Bragg reflectors", IEEE J. Quantum Electron., Vol.QE-17, No.5, pp.651-658, May 1981.
- [81UTAb] K. Utaka, K. Kobayashi, F. Koyama, Y. Abe and Y. Suematsu, "Single-wavelength operation of $1.53 \mu\text{m}$ GaInAsP buried-heterostructure integrated twin-guide laser with distributed Bragg reflector under direct modulation up to 1 GHz", Electron. Lett., Vol.17, No.11, pp.368-369, May 1981.
- [81UTAc] K. Utaka, S. Akiba, K. Sakai and Y. Matsushima, "Room-temperature CW operation of distributed-feedback buried-heterostructure InGaAsP/InP lasers emitting at $1.57 \mu\text{m}$ ", Electron. Lett., Vol.17, No.25/26, pp.961-963, Dec. 1981.
- [81WAT] R. Watanabe, Y. Fujii, K. Nosu and J. I. Minowa, "Optical multi/demultiplexers for single-mode fiber transmission", IEEE J. Quantum Electron., Vol.QE-17, No.6, pp.974-982, June 1981.
- [81YAM] Y. Yamamoto and T. Kimura, "Coherent optical fiber transmission", IEEE J. Quantum Electron., Vol. QE-17, No.6, pp.919-935, June 1981.
- [82ABEa] Y. Abe, K. Kishino, Y. Suematsu and S. Arai, " $1.55 \mu\text{m}$ GaInAsP/InP distributed Bragg reflector laser directly coupled to external waveguide", Top. Meet. on Integrated and Guided-wave Opt., WB2, 1982.
- [82ABEb] Y. Abe, K. Kishino, T. Tanbun-ek, S. Arai, F. Koyama, K. Matsumoto, T. Watanabe and Y. Suematsu, "Room-temperature CW operation of $1.6 \mu\text{m}$ GaInAsP/InP buried-heterostructure integrated laser with butt-jointed built-in distributed-Bragg-reflection waveguide", Electron. Lett., Vol.18, No.10, pp.410-411, May 1982.
- [82AKI] S. Akiba, K. Utaka, S. Sakai and Y. Matsushima, "Low-threshold current distributed-feedback InGaAsP/InP CW lasers", Electron. Lett., Vol.18, pp.77-78, Jan. 1982.
- [82ARA] Y. Arakawa and H. Sakaki, "Multidimensional quantum well laser and temperature dependence of its threshold current", Appl. Phys. Lett., Vol.40, pp.939-941, 1982.
- [82CHA] M. B. Chang, "Total internal reflection deflector", Appl. Opt., Vol.21, No.21, p.3879, Nov. 1982.
- [82HENa] C. Henry, "Theory of the linewidth of semiconductor lasers", IEEE J. Quantum Electron., Vol. QE-18, No.2, pp.259-264, Feb. 1982.
- [82HENb] P. D. Henshaw, "Laser beamsteering using the photorefractive effect", Appl. Opt., Vol.21, No.13, p.2323, July 1982.
- [82IGA] K. Iga, M. Oikawa, S. Misawa, J. Banno and Y. Kokubun, "Stacked planar optics ; an application of the planar microlens", Appl. Opt., Vol.21, pp.3456-3460, 1982.
- [82IKE] T. Ikegami, K. Kuroiwa, Y. Itaya, S. Shinohara, K. Hagimoto and N. Ikegami, " $1.5 \mu\text{m}$ transmission experiment with distributed feedback laser", in Proc. 8th Euro. Conf. on Opt. Fiber Commun. (ECOC'82), Cannes, France, Sept. 1982.
- [82IWA] K. Iwashita, K. Nakagawa, T. Matsuoka and M. Nakahara, "400 Mb/s transmission test using a $1.53 \mu\text{m}$ DFB laser diode and 104 km single mode fiber", Electron. Lett., Vol.18, No.22, pp.937-938, Oct. 1982.

- [82KIS] K. Kishino, S. Aoki and Y. Suematsu, "Wavelength variation of 1.6 μm wavelength buried heterostructure GaInAsP/InP lasers due to direct modulation", IEEE J. Quantum Electron., Vol. QE-18, No.3, pp.343-351, Mar. 1982.
- [82KOB] S. Kobayashi, Y. Yamamoto, M. Ito and T. Kimura, "Direct frequency modulation in AlGaAs semiconductor lasers", IEEE J. Quantum Electron., Vol. QE-18, No.4, pp.582-595, Apr. 1982.
- [82KOK] Y. Kokubun and K. Iga, "Index profiling of distributed-index lenses by a shearing interference method", Appl. Opt., Vol.21, No.6, pp.1030-1034, Mar. 1982.
- [82MAT] T. Matsuoka, H. Nagai, Y. Itaya, Y. Noguchi, U. Suzuki and T. Ikegami, "CW operation of DFB-BH GaInAsP/InP lasers in 1.5 μm wavelength region", Electron. Lett., Vol.18, No.1, pp.27-28, Jan. 1982.
- [82OGA] K. Ogawa, "Analysis of mode partition noise in laser transmission systems", IEEE J. Quantum Electron., Vol. QE-18, No.5, pp.849-855, May 1982.
- [82OIKa] M. Oikawa and K. Iga, "Distributed-Index planar microlens", Appl. Opt., Vol.21, No.6, pp.1052-1055, Mar. 1982.
- [82OIKb] M. Oikawa, K. Iga and S. Misawa, "Optical tap array using distributed-index planar microlens", Electron. Lett., Vol.18, No.8, pp.316-317, Apr. 1982.
- [82OKO] T. Okoshi, "Optical Fibers", Academic Press, New York, 1982.
- [82RUN] P. K. Runge, C. A. Brackett, R. F. Gleason, D. Kalish, P. D. Lazay, T. R. Meeker, D. G. Ross, C. B. Swan, A. R. Wahl, R. E. Wagner and J. C. Williams, "101 km lightwave undersea system experiment at 274 Mb/s", Topical Meeting on Optical Fiber Communication, PD7, Apr. 1982.
- [82SUE] Y. Suematsu, ed., "Optical devices and fibers", JARECT, Ohm-sha Pub. Co. Ltd., 1982.
- [82YAM] S. Yamamoto, K. Utaka, S. Akiba, K. Sakai, Y. Matsushima, S. Sakaguchi and N. Seki, "280 Mbit/s single-mode fiber transmission with DFB laser diode emitting at 1.53 μm ", Electron. Lett., Vol.18, No.5, pp.239-240, Mar. 1982.
- [83ALF] R. C. Alferness, C. H. Joyner, L. L. Buhl and S. K. Korotky, "High-speed traveling-wave directional coupler switch/modulator for $\lambda = 1.3 \mu\text{m}$ ", IEEE J. Quantum Electron., Vol. QE-19, No.9, pp.1339-1341, Sep. 1983.
- [83ANT] A. Antreasyan and S. Wang, "Semiconductor integrated etalon interference laser with a curved resonator", Appl. Phys. Lett., Vol.42, pp.562-564, 1983.
- [83FOR] S. Forouhar, R. X. Lu, W. S. C. Chang, R. L. Davis, and S. K. Yao, "Chirped grating lenses on Nb₂O₅ transition waveguides", Appl. Opt., Vol.22, pp.3128-3132, 1983.
- [83FUR] K. Furuya, K. Yoshida, K. Honjo and Y. Suematsu, "Precise control of grating pitch by electron-beam exposure system for integrated optics", Trans. IECE Japan, Vol.E66, pp.561-562, 1983.
- [83GEEa] C. M. Gee, G. D. Thurmond and H. W. Yen, "Traveling-wave electrooptic modulator", Appl. Opt., Vol.22, pp.2034-2037, 1983.
- [83GEEb] C. M. Gee, G. D. Thurmond and H. W. Yen, "17-GHz bandwidth electro-optic modulator", Appl. Phys. Lett., Vol.43, pp.998-1000, 1983.
- [83HAR] C. Harder, K. Vahala and A. Yariv, "Measurement of the linewidth enhancement factor α of semiconductor lasers", Appl. Phys. Lett., Vol.42, No.4, pp.328-330, Feb. 1983.
- [83HEN] C. H. Henry, "Theory of the phase noise and power spectrum of a single mode injection laser", IEEE J. Quantum Electron., Vol. QE-19, p.1391, Sept. 1983.
- [83KAM] T. Kambayashi and J. Sarma, "Spontaneous emission noise distribution from a gain-guided multimode waveguide", IEEE J. Quantum Electron., Vol. QE-19, pp.1084-1091, 1983.
- [83KOL] R. M. Kolbas, J. Abrokwhah, J. K. Carney, D. H. Bradshaw, B. R. Elmer and J. R. Biard, "Planar

- monolithic integration of a photodiode and a GaAs preamplifier”, Appl. Phys. Lett., Vol.43, pp.821-823, 1983.
- [83KOY] F. Koyama, Y. Suematsu, S. Arai and T. Tawee, “1.5-1.6 μm GaInAsP/InP dynamic-single-mode (DSM) lasers with distributed Bragg reflector”, IEEE J. Quantum Electron., Vol.QE-19, No.6, pp.1042-1051, June 1983.
- [83MIT] I. Mito, M. Kitamura, Ke. Kobayashi, S. Murata, M. Seki, Y. Odagiri, H. Nishimoto, M. Yamaguchi and Ko. Kobayashi, “InGaAsP double-channel-planar-buried-heterostructure laser diode (DC-PBHLD) with effective current confinement”, IEEE J. Lightwave Technol., Vol.LT-1, pp.195-202, 1983.
- [83OIK] M. Oikawa, K. Iga, S. Misawa and Y. Kokubun, “Improved distributed-index planar microlens and its application to 2-D lightwave components”, Appl. Opt., Vol.22, pp.441-442, 1983.
- [83SHO] K. A. Shore, “Optically-steered twin-strip laser beam scanner”, Opt. & Quantum Electron., Vol.15, p.451, 1983.
- [83SUEa] Y. Suematsu, “Long-wavelength optical fiber communication”, Proc. IEEE, Vol.71, No.6, pp.692-721, June 1983.
- [83SUEb] Y. Suematsu, S. Arai and K. Kishino, “Dynamic single mode semiconductor laser with a distributed reflector”, IEEE J. Lightwave Technol., Vol.LT-1, pp.161-176, Mar. 1983.
- [83SUEc] I. Suemune, Y. Kan and M. Yamanishi, “Semiconductor light sources with capabilities of electronic beam-scanning”, Electron. Lett., Vol.19, No.23, p.1002, Nov. 1983.
- [83TAK] K. Takizawa, “Electrooptic Fresnel lens-scanner with an array of channel waveguides”, Appl. Opt., Vol.22, No.16, p.2468, 1983.
- [83TOH] Y. Tohmori, Y. Suematsu, H. Tsushima and S. Arai, “Wavelength Tuning of GaInAsP/InP Integrated Laser with Butt-Jointed Built-in Distributed Bragg Reflector”, Electron. Lett., Vol.19, No.17, pp.656-657, Aug. 1983.
- [83YAM] M. Yamanishi and I. Suemune, “Quantum mechanical size modulation light source - A new field effect semiconductor laser or light emitting device”, Jpn. J. Appl. Phys., Vol.22, No.1, pp.L22-L24, Jan. 1983.
- [84BAR] N. Bar-Chaim, K. Y. Lau, I. Ury and A. Yariv, “Monolithic optoelectronic integration of a GaAlAs laser, a field-effect transistor, and a photodiode”, Appl. Phys. Lett., Vol.44, pp.941-943, 1984.
- [84BENa] C. H. Bennett and G. Brassard, “Quantum Cryptography: Public Key Distribution and Coin Tossing”, Proc. of IEEE Intern. Conf. on Computers, Systems, and Signal Processing, Bangalore, India IEEE, New York, pp.175-179, 1984.
- [84BENb] C. H. Bennett, G. Brassard, S. Breidbart, S. Wiesner and S. Source, “Eavesdrop-Detecting Quantum Communications Channel”, IBM Technical Disclosure Bulletin, Vol.26, No.8, pp.4363-4366, Jan. 1984.
- [84CRE] R. Crecits, P. J. Lemaire, W. A. Reed, D. S. Shenk and K. L. Walker, “Fabrication of low loss single mode fibers”, Technical Digest of OFC'84, New Orleans, TU13, Feb. 1984.
- [84HAU] H. A. Haus, L. Molter-Orr and F. J. Leonberger, “Multiple waveguide lens”, Appl. Phys. Lett., Vol.45, pp.19-21, 1984.
- [84IGA] K. Iga, K. Kokubun and M. Oikawa, “Fundamentals of microoptics”, Academic Press, New York, 1984.
- [84JOH] L. M. Johnson, Z. L. Liao and S. H. Groves, “Low-loss GaInAsP buried-heterostructure optical waveguide branches and bends”, Appl. Phys. Lett., Vol.44, pp.278-280, 1984.

- [84KAE] K. Kaede and R. Ishikawa, "Ten-port graded-index waveguide star coupler fabricated by dry ion diffusion", *Electron. Lett.*, Vol.20, No.16, pp.647-649, Aug. 1984.
- [84KAS] B. L. Kasper, R. A. Linke, K. L. Walker, L. G. Cohen, T. L. Koch, T. J. Bridges, E. G. Burkhard, R. A. Logan, R. W. Dawson and J. C. Campbell, "A 130 km transmission experiment at 2 Gb/s using silica-core fiber and a vapor phase transported DFB laser", in *Proc. 10th Euro. Conf. on Opt. Fiber Commun. (ECOC '84)*, Stuttgart, W. Germany, Post-deadline Paper, PD-6, Sept. 1984.
- [84KOC] T. L. Koch and J. E. Bowers, "Nature of wavelength chirping in directly modulated semiconductor lasers", *Electron. Lett.*, Vol.20, No.25/26, pp.1038-1039, Dec. 1984.
- [84KOYa] F. Koyama, K. Komori, S. Takahashi and Y. Suematsu, "Dynamic single mode condition for semiconductor lasers", *ECOC'84*, Stuttgart, 1984.
- [84KOYb] F. Koyama, Y. Suematsu, K. Kojima and K. Furuya, "1.5 μm phase adjusted activate distributed reflector laser for dynamic single-mode operation", *Electron. Lett.*, Vol.20, No.10, pp.391-393, May 1984.
- [84LiNa] R. A. Linke, B. L. Kasper, J. C. Campbell, A. G. Dentai and I. P. Kaminow, "120 km lightwave transmission experiment at 1 Gbit/s using a new long-wavelength avalanche photodetector", *Electron. Lett.*, Vol.20, No.12, pp.498-499, June 1984.
- [84LiNb] R. A. Linke, "Transient chirping in single-frequency lasers : lightwave systems consequences", *Electron. Lett.*, Vol.20, No.11, pp.473-474, May 1984.
- [84RUS] J. D. Rush, K. J. Beales, D. M. Cooper and W. J. Duncan, "Influence of hydrogen on optical fibres - implications and potential solutions", *ECOC '84*, pp.108-109, Sept. 1984.
- [84SEK] K. Sekartedjo, N. Eda, K. Furuya, Y. Suematsu, F. Koyama and T. Tanbun-Ek, "1.5 μm phase-shifted DFB lasers for single-mode operation", *Electron. Lett.*, Vol.20, No.2, pp.80-81, Jan. 1984.
- [84TOH] 東盛裕一, 蔣霄, 末松安晴, "半導体レーザの波長制御", *信学研資*, Vol.OQE84-81, pp.15-22, 1984.
- [84TRA] D. C. Tran, G. H. Siegel and B. Bendow, "Heavy metal fluoride glasses and fibers : Review", *IEEE/OSA J. Lightwave Technol.*, Vol.LT-2, No.5, pp.566-586, Oct. 1984.
- [84WAL] S. D. Walker, L. C. Blank and L. Bickers, "1.8 Gbit/s 65 km optical transmission experiment using a 1.478 μm DFB laser and Ge APD receiver", *Electron. Lett.*, Vol.20, No.18, pp.717-719, Aug. 1984.
- [84WOO] T. H. Wood, C. A. Burrus, D. A. B. Miller, D. S. Chemla, T. C. Damen, A. C. Gossard and W. Wiegmann, "High-speed optical modulator with GaAs/GaAlAs quantum wells in a p-i-n diode structure", *Appl. Phys. Lett.*, Vol.44, No.1, pp.16-18, Jan. 1984.
- [84YAM] M. Yamaga and Y. Miyazaki, "RF sputtering crystal growth and spectroscopy of Nd doped $\text{Y}_3\text{Ga}_5\text{O}_{12}$ thin film waveguide on $\text{Y}_3\text{Al}_5\text{O}_{12}$ substrate for optical amplifier", *Jpn. J. Appl. Phys.*, Vol.23, pp.312-316, 1984.
- [84YAP] D. Yap and L. M. Johnson, "Coupling between successive Ti:LiNbO₃ waveguide bends and branches", *Appl. Opt.*, Vol.23, pp.2991-2998, 1984.
- [85ARA] Y. Arakawa and A. Yariv, "Theory of gain, modulation response and spectral linewidth in AlGaAs quantum well lasers", *IEEE J. Quantum Electron.*, Vol.QE-21, No.10, pp.1666-1674, Oct. 1985.
- [85ASA] M. Asada, "Theoretical linewidth enhancement factor α of GaInAs/InP lasers", *Trans. IECE Japan*, Vol.E68, No.8, pp.518-520, Aug. 1985.
- [85DON] J. P. Donnelly, N. L. DeMeo, F. J. Leonberger, S. H. Groves, P. Vohl and F. J. O'Donnell, "Single-mode rib waveguides fabricated in InP material systems ; InP p+ -n- n+ guides for phase modulation of TE-polarized radiation", *IEEE J. Quantum Electron.*, Vol.QE-21, pp.1147-1151, 1985.
- [85GNA] A. H. Gnauck, B. L. Kasper, R. A. Linke, R. W. Dawson, T. L. Koch, T. J. Bridges, E. G. Burkhardt, R. T.

- Yen, D. P. Wilt, J. C. Campbell, K. C. Nelson and L. G. Cohen, "4-Gb/s transmission over 117 km of optical fiber using a novel electronic multiplexer/demultiplexer", IEEE J. Lightwave Technol., Vol. LT-3, No.5, pp.1032-1035, Oct. 1985.
- [85IGA] K. Iga, "Modulation limit of semiconductor lasers by some parametric modulation schemes", Trans. IECE Japan, Vol.E68, No.7, pp.417-420, July 1985.
- [85ITO] M. Ito, T. Kumai, H. Hamaguchi, M. Makiuchi, K. Nakai, O. Wada and T. Sakurai, "High-speed monolithically integrated GaAs photoreceiver using a metal-semiconductor-metal photodiode", Appl. Phys. Lett., Vol.47, pp.1129-1131, 1985.
- [85IWA] Y. Iwamoto and H. Fukinuki, "Recent advances in submarine optical fiber cable transmission systems in Japan", IEEE J. Lightwave Technol., Vol.LT-3, No.5, pp.1005-1016, Oct. 1985.
- [85KAW] M. Kawachi, Y. Yamada, M. Yasu and M. Kobayashi, "Guided-wave optical wavelength-division multi/demultiplexer using high-silica channel waveguides", Electron. Lett., Vol.21, No.8, pp.314-315, Apr. 1985.
- [85KIT] M. Kitamura, M. Yamaguchi, K. Emura, I. Mito and K. Kobayashi, "Lasing mode and linewidth control by phase tunable distributed feedback laser diodes with double channel planar buried heterostructure (DFB-DC-PBH LD's)", IEEE J. Quantum Electron., Vol.QE-21, No.5, pp.415-417, May 1985.
- [85KOC] T. L. Koch and R. Alferness, "Dispersion compensation by active predistorted signal synthesis", IEEE J. Lightwave Technol., Vol.LT-3, No.4, pp.800-805, Aug. 1985.
- [85KOKa] Y. Kokubun, S. Suzuki, Y. Iijima and K. Iga, "Mesh waveguide optical star coupler", Electron. Lett., Vol.21, No.11, pp.482-484, May 1985.
- [85KOKb] Y. Kokubun, T. Fuse and K. Iga, "Optimum length of multimode optical branching waveguide for reducing its mode dependence", Appl. Opt., Vol.24, No.24, pp.4408-4013, 1985.
- [85KOY] F. Koyama and Y. Suematsu, "Analysis of Dynamic Spectral Linewidth of Dynamic-Single-Mode (DSM) Lasers and Related Transmission Bandwidth of Single-Mode Fibers", IEEE J. Quantum Electron., Vol.QE-21, No.4, pp.292-297, Apr. 1985.
- [85MOR] Y. Mori, J. Shibata, Y. Sasai, H. Serizawa and T. Kajiwara, "Operation principle of the InGaAsP/InP laser transistor", Appl. Phys. Lett., Vol.47, No.7, pp.649-651, Oct. 1985.
- [85MUK] S. Mukai, M. Watanabe, M. Itoh, H. Yajima, Y. Horikoshi and S. Uekusa, "Beam scanning and switching characteristics of twin striped lasers with a reduced stripe spacing", Opt. & Quantum Electron., Vol.17, p.431, 1985.
- [85OLS] R. Olshansky, D. M. Fye, J. Manning and C. B. Su, "Effect of nonlinear gain on the bandwidth of semiconductor lasers", Electron. Lett., Vol.21, No.17, pp.721-722, Aug. 1985.
- [85SEA] C. T. Seaton, J. D. Valera, R. L. Shoemaker, G. I. Stegeman, J. T. Chilwell and S. D. Smith, "Nonlinear TE waves guided by thin dielectric films bounded by nonlinear media", IEEE J. Quantum Electron., Vol.QE-21, pp.774-783, 1985.
- [85SEI] M. Seino, M. Shibayama, I. Sawaki and H. Nakajima, "Si_{1-x}Ti_xO₂ guided-wave connecting circuits grown by magnetron sputtering", OFC'85, San Diego, WK5, Feb. 1985.
- [85TOHa] Y. Tohmori, K. Komori, S. Arai, Y. Suematsu and H. Oohashi, "Wavelength tunable 1.5 μ m GaInAsP/InP bundle-integrated-guide distributed Bragg reflector (BIG-DBR) lasers", Trans. IECE Japan, Vol.E68, No.12, pp.788-789, Dec. 1985.
- [85TOHb] Y. Tohmori, X. Jiang, S. Arai, F. Koyama and Y. Suematsu, "Novel structure GaInAsP/InP 1.5-1.6 μ m bundle integrated-guide (BIG) distributed Bragg reflector laser", Jpn. J. Appl. Phys., Vol.24,

- No.6, pp.L399-L401, June 1985.
- [85TSA] C. S. Tsai, D. Young, W. Chen, L. Adkins, C. C. Lee and H. Glass, "Noncolinear coplanar magneto-optic interaction of guided optical wave and magnetostatic surface waves in yttrium iron garnet-gadolinium gallium garnet waveguides", *Appl. Phys. Lett.*, Vol.47, pp.651-654, 1985.
 - [85TUC] R. S. Tucker, "High-speed modulation of semiconductor lasers", *IEEE J. Lightwave Technol.*, Vol. LT-3, No.6, pp.1180-1192, Dec. 1985.
 - [85URA] 裏, 栖原, 西原, 小山, "光集積ディスクピックアップ用集積グレーティング", *信学論*, Vol. J68-C, pp.803-811, 1985.
 - [85YAM] M. Yamaguchi, M. Kitamura, S. Murata, I. Mito and K. Kobayashi, "Wide range wavelength tuning in 1.3 μm DBR-DC-PBH-LDs by current injection into the DBR region", *Electron. Lett.*, Vol.21, No.2, pp.63-65, Jan. 1985.
 - [86ADA] A. R. Adams, "Band Structure Engineering for Low-threshold High-Efficiency Semiconductor Lasers", *Electron. Lett.*, Vol.24, pp.249-250, 1986.
 - [86AMA] H. Amano, N. Sawaki, I. Akasaki and Y. Toyoda, "Metalorganic vapor phase epitaxial growth of a high quality GaN film using an AlN buffer layer", *Appl. Phys. Lett.*, Vol.48, p.353, 1986.
 - [86ARI] J. Ariyasu, C. T. Seaton, G. I. Stegman and J. V. Moloney, "Stability of TE_1 -like waves in planar optical waveguides with nonlinear substrate and cladding bounding media", *IEEE J. Quantum Electron.*, Vol.QE-22, pp.984-987, 1986.
 - [86ASA] M. Asada, Y. Miyamoto and Y. Suematsu, "Gain and the threshold of three-dimensional quantum-box lasers", *IEEE J. Quantum Electron.*, Vol.QE-22, pp.1915-1921, 1986.
 - [86BOW] J. Bowers, B. R. Hemenway, A. H. Gnauck and D. P. Wilt, "High-speed InGaAsP constricted-mesa lasers", *IEEE J. Quantum Electron.*, Vol.QE-22, No.6, pp.833-844, June 1986.
 - [86DUG] M. A. Duguay, Y. Kokubun, T. L. Koch and L. Pfeiffer, "Antiresonant reflecting optical waveguides in SiO_2 -Si multilayer", *Appl. Phys. Lett.*, Vol.49, pp.13-15, 1986.
 - [86GLI] M. Glick, F. K. Reinhart, G. Weimann and W. Schlapp, "Quadratic electro-optic light modulation in a GaAs/AlGaAs multiquantum well heterostructure near the excitonic gap", *Appl. Phys. Lett.*, Vol.48, pp.989-991, 1986.
 - [86GOR] J. P. Gordon and H. Haus, "Random walk of coherently amplified solitons in optical fiber transmission", *Opt. Lett.*, Vol.11, No.10, pp. 665-667, Oct. 1986.
 - [86HEU] K. Heuberger and W. Lukosz, "Embossing technique for fabricating surface relief grating on hard oxide waveguides", *Appl. Opt.*, Vol.25, pp.1499-1504, 1986.
 - [86HIM] M. D. Himel and U. J. Gibson, "Measurement of planar waveguide losses using a coherent fiber bundle", *Appl. Opt.*, Vol.25, pp.4413-4416, 1986.
 - [86IGA] 伊賀健一, 國分泰雄, "光ファイバ", 新 OHM 文庫, オーム社, 東京, 1986.
 - [86INO] H. Inoue, K. Hiruma, K. Ishida, H. Sato and H. Matsumura, "Switching characteristics of GaAs directional coupler optical switches", *Appl. Opt.*, Vol.25, pp.1484-1490, 1986.
 - [86ISH] M. Ishikawa, Y. Ohba, Y. Watanabe, H. Sugawara, M. Yamamoto and G. Hatakoshi, "Room temperature CW operation of transverse mode stabilized InGaAlP visible light laser diodes", *Trans. IECE Japan*, Vol.E69, No.4, pp.382-384, 1986.
 - [86KAT] T. Katsuyama, H. Nakamura, S. Sakano, H. Inoue, K. Morosawa and H. Matsumura, "InGaAsP/InP monolithic integrated circuits for laser switching and optical amplification", *Topical Meeting on Integrated and Guided-wave Optics (IGWO'86)*, Atlanta (U. S. A.), PDP-11, Feb. 1986.
 - [86KOD] K. Kodate, T. Kamiya, Y. Okada and H. Takenaka, "Focusing characteristics of high-efficiency

- Fresnel zone plate fabricated by deep ultraviolet lithography”, Jpn. J. Appl. Phys., Vol.25, pp.223-227, 1986.
- [86KOKa] Y. Kokubun, S. Suzuki and K. Iga, “Evaluation of distributed-index branching waveguide by phase space,” Appl. Opt., 25, pp.3401-3404, 1986.
- [86KOKb] Y. Kokubun, S. Suzuki and K. Iga, “Phase space evaluation of distributed-index branching waveguides”, IEEE J. Lightwave Technol., Vol.LT-4, No.10, pp.1534-1541, Oct. 1986.
- [86KOR] S. K. Korotky, E. A. J. Marcatili, G. Eisenstein, J. J. Veselka, F. Heismann and R. C. Alferness, “Integrated optic, narrow-linewidth laser”, Appl. Phys. Lett., Vol.49, pp.10-12, 1986.
- [86NAK] H. Nakano, S. Yamashita, T. P. Tanaka, M. Hirao and M. Maeda, “Monolithic integration of laser diodes, photomonitor, and laser driving and monitoring circuits on a semi-insulating GaAs”, IEEE J. Lightwave Technol., Vol.LT-4, No.6, pp.574-582, June 1986.
- [86NOD] Y. Noda, M. Suzuki, Y. Kushihiro and S. Akiba, “High-speed electroabsorption modulator with strip-loaded GaInAsP planar waveguide”, IEEE J. Lightwave Technol., Vol.LT-4, No.10, pp.1445-1453, Oct. 1986.
- [86ONO] H. Onodera and M. Nakajima, “High-efficiency light modulator using guided-to-radiation mode coupling in a graded-index waveguide”, Appl. Opt., Vol.25, pp.2175-2183, 1986.
- [86SON] G. E. Sonek, J. M. Ballantyne, Y. J. Chen, G. M. Carter, S. W. Brown, E. S. Koteles and J. P. Salerno, “GaAs/AlGaAs multiple quantum well waveguides ; study using grating coupler technique”, IEEE J. Quantum Electron., Vol.QE-22, pp.1015-1018, 1986.
- [86SPE] IEEE/OSA J. Lightwave Technol., Special Issue on Fiber, Cable, and Splicing Technology, Vol.LT-4, No.8, Aug. 1986.
- [86SUH] T. Suhara, S. Fujiwara and H. Nishihara, “Proton-exchanged Fresnel lenses in Ti:LiNbO₃ waveguides”, Appl. Opt., Vol.25, pp.3379-3383, 1986.
- [86TEM] H. Temkin, R. A. Logan, N. A. Olsson, C. H. Henry, G. J. Dolan, R. F. Kazarinov and L. F. Johnson, “InGaAsP ridge waveguide distributed feedback lasers operating near 1.55 μm ”, IEEE J. Lightwave Technol., Vol.LT-4, No.5, pp.520-529, May 1986.
- [86TOH] Y. Tohmori, H. Oohashi, T. Kato, S. Arai, K. Komori, and Y. Suematsu, “Wavelength stabilization of 1.5 μm GaInAsP/InP bundle-integrated-guide distributed Bragg reflector (BIG-DBR) lasers integrated with wavelength tuning region”, Electron. Lett., Vol.22, No.3, pp.138-140, Jan. 1986.
- [86UOM] K. Uomi, T. Ohtoshi and N. Chinone, “Ultra high relaxation oscillation frequency (~ 50 GHz) in modulation doped multiquantum well (MD-MQW) lasers : theoretical analysis”, 10th IEEE International Semiconductor Laser Conf., Kanazawa, M-6, pp.184-185, Oct. 1986.
- [86URA] S. Ura, T. Suhara, H. Nishihara and J. Koyama, “An integrated-optic disk pickup device”, IEEE J. Lightwave Technol., Vol.LT-4, No.7, pp.913-918, July 1986.
- [86VES] J. J. Veselka and S. K. Korotky, “Diffusion conditions yielding Ti:LiNbO₃ low insertion-loss guides for TM polarized light at 1.56 μm and low voltage directional coupler switches”, IEEE J. Quantum Electron., Vol.QE-22, pp.933-938, 1986.
- [86WAB] S. Wabnitz, E. M. Wright, C. T. Seaton and G. I. Stegeman, “Instabilities and all-optical phase-controlled switching in a nonlinear directional coherent coupler”, Appl. Phys. Lett., Vol.49, pp.838-840, 1986.
- [86WEB] J. P. Weber and S. Wang, “Analysis of the far-field output angle scanning by injection locking of a diode laser array”, Appl. Phys. Lett., Vol.48, No.25, p.1719, Jun. 1986.
- [86YAMa] M. Yamada, “Theory of mode competition noise in semiconductor injection lasers”, IEEE J.

- Quantum Electron., Vol.QE-22, No.7, pp.1052-1059, July 1986.
- [86YAMb] S. Yamazaki, K. Emura, M. Shikada, M. Yamaguchi, I. Mito and K. Minemura, "Long-span optical FSK heterodyne single-filter detection transmission experiment using a phase-tunable DFB laser diode", Electron. Lett., Vol.22, No.1, pp.5-7, Jan. 1986.
 - [86YOK] H. Yokota, H. Kanamori, Y. Ishiguro, G. Tanaka, S. Tanaka, H. Tanaka, M. Watanabe, S. Suzuki, K. Yano, M. Hoshikawa and H. Shimba, "Ultra-low-loss pure silica core single-mode fiber and transmission experiment", OFC'86 (Atlanta), PD-3, Feb. 1986.
 - [87AIK] M. Aiki, T. Tsuchiya and T. Kamoto, "High-speed integrated optical repeater design method", Trans. IECE Japan, Vol.E69, pp.113-123, 1987.
 - [87BOW] J. E. Bowers, "High speed semiconductor laser design and performance", Solid State Electron., Vol.30, pp.1-11, 1987.
 - [87DEF] A. P. DeFonzo, M. Jarwala and C. Lutz, "Transient response of planar integrated optoelectronic antennas", Appl. Phys. Lett., Vol.50, pp.1155-1157, 1987.
 - [87DON] J. P. Donnelly, H. A. Haus and N. Whitaker, "Symmetric three-guide optical coupler with nonidentical center and outside guides", IEEE J. Quantum Electron., Vol.QE-23, pp.401-406, 1987.
 - [87GOT] N. Goto and Y. Miyazaki, "SAW propagation characteristics in thin-film surface acoustic waveguides for acousto-optic devices", Trans. IECE Japan, Vol.E69, pp.47-55, 1987.
 - [87IMO] K. Imoto, H. Sano, M. Miyazaki and Y. Takasaki, "Guided wave multi/demultiplexers with high stopband rejection", Electron. Lett., Vol.23, No.9, pp.472-473, Apr. 1987.
 - [87ISHa] H. Ishikawa, H. Soda, K. Wakao, K. Kihara, K. Kamite, Y. Kotaki, M. Matsuda, H. Sudo, S. Yamakoshi, S. Isozumi and H. Imai, "Distributed feedback laser emitting at 1.3 μm for gigabit communication systems", IEEE J. Lightwave Technol., Vol.LT-6, No.6, pp.848-855, June 1987.
 - [87ISHb] K. Ishida, H. Nakamura, H. Matsumura, T. Kadoi and H. Inoue, "InGaAsP/InP optical switches using carrier induced refractive index change", Appl. Phys. Lett., Vol.50, pp.141-142, 1987.
 - [87JOH] S. John, "Strong localization of photons in certain disordered dielectric superlattices", Phys. Rev. Lett., Vol.58, pp.2486-2489, 1987.
 - [87KAP] E. Kapon and R. Bhat, "Low-loss single-mode GaAs/AlGaAs optical waveguides grown by organometallic vapor phase epitaxy", Appl. Phys. Lett., Vol.50, pp.1628-1630, 1987.
 - [87KAW] Y. Kawamura, K. Wakita, Y. Yoshikuni, Y. Itaya and H. Asahi, "Monolithic integration of a DFB laser and an MQW optical modulator in the 1.5 μm wavelength range", IEEE J. Quantum Electron., Vol. QE-23, No.6, pp.915-918, June 1987.
 - [87KOR] S. K. Korotky, G. Eisenstein, R. S. Tucker, J. J. Veselka and G. Raybon, "Optical intensity modulation to 40 GHz using a waveguide electrooptic switch", Appl. Phys. Lett., Vol.50, pp.1631-1633, 1987.
 - [87KOT] Y. Kotaki, M. Matsuda, M. Yano, H. Ishikawa and H. Imai, "1.55 μm wavelength tunable FBH-DBR laser", Electron. Lett., Vol.23, No.7, pp.325-326, Mar. 26, 1987.
 - [87LAN] R. J. Lang, A. Yariv and J. Salzman, "Laterally coupled-cavity semiconductor lasers", IEEE J. Quantum Electron., Vol.QE-23, pp.395-400, 1987.
 - [87LIU] J. M. Liu and C. Yeh, "Optical switching by saturation-induced phase changes in an active directional coupler", Appl. Phys. Lett., Vol.50, pp.1625-1627, 1987.
 - [87MEA] R. J. Mears, L. Reekie, I. M. Jauncey and D. N. Payne, "Low-Noise Erbium-Doped Fiber Amplifier Operating at 1.54 μm ", Electron. Lett., Vol.23, No.19, pp.1026-1028, Sept. 10, 1987.
 - [87MIZ] T. Mizumoto, Y. Kawaoka and Y. Naito, "Waveguide-type optical isolator using the Faraday and Cotton-Mouton effects", Trans. IECE Japan (Section E), E69, pp.968-972, 1987.

- [87MURa] S. Murata, I. Mito and K. Kobayashi, "Over 5.8 nm continuous wavelength tuning of 1.5 μm wavelength tunable laser", OFC/IOOC'87, WC3, 1987.
- [87MURb] S. Murata, I. Mito and K. Kobayashi, "Over 720 GHz (5.8 nm) frequency tuning by a 1.5 μm DBR laser with phase and Bragg wavelength control regions", Electron. Lett., Vol.23, No.8, pp.403-405, Apr. 1987.
- [87MURc] 村田浩, "光ファイバケーブル", オーム社, 東京, 1987.
- [87NAK] M. Nakazawa, "Diode Laser - Pumped Operation of an Er_3^{+} -doped Single-Mode Fiber Laser", Electron. Lett., Vol.23, No.20, p.1076, Sept. 24, 1987.
- [87NEU] J. von Neumann, "Notes on the photon-disequilibrium-amplification scheme (JvN), September 16, 1953", IEEE J. Quantum Electron., Vol.QE-23, No.6, pp.659-673, June 1987. (復刻版)
- [87OGI] S. Ogita, M. Yano, H. Ishikawa and H. Imai, "Linewidth reduction in DFB laser by detuning effect", Electron. Lett., Vol.23, No.8, pp.393-394, Apr. 1987.
- [87OKO] T. Okoshi, "Recent advances in coherent optical fiber communication systems", IEEE J. Lightwave Tech., Vol.LT-5, No.1, pp.44-52, Jan. 1987.
- [87OKU] H. Okuda, Y. Hirayama, H. Furuyama, J. Kinoshita and M. Nakamura, "Five-wavelength integrated DFB laser arrays with quarter-wave-shifted structures", IEEE J. Quantum Electron., Vol.QE-23, No.6, pp.843-848, June 1987.
- [87OSB] G. C. Osbourn, P. L. Gourley, J. J. Fritz, Q. M. Biefeld, L. R. Dawson and T. E. Zipperian, "Semiconductor and Semimetals", R. K. Willardson and A. C. Beer, eds., Academic Press, New York, Vol.24, p.459, 1987.
- [87OSI] M. Osinski and J. Buus, "Linewidth broadening factor in semiconductor lasers - An overview", IEEE J. Quantum Electron., Vol.QE-23, No.1, pp.9-29, Jan. 1987.
- [87SAI] T. Saitoh and T. Mukai, "1.5 μm traveling-wave semiconductor laser amplifier", IEEE J. Quantum Electron., Vol.QE-23, No.6, pp.1010-1020, June 1987.
- [87SAS] Y. Sasaki, "Long-length low-loss polarization-maintaining fibers", IEEE J. Lightwave Technol., Vol.LT-5, No.9, pp.1139-1146, Sept. 1987.
- [87SEK] M. Seki, R. Sugawara, Y. Hanada, E. Okuda, H. Wada and T. Yamasaki, "High performance guided-wave multi/demultiplexer based on novel design using embedded gradient-index waveguides in glass", Electron. Lett., Vol.23, No.18, pp.948-950, Aug. 27, 1987.
- [87SUZ] M. Suzuki, Y. Noda, H. Tanaka, S. Akiba, Y. Kushiro and H. Isshiki, "Monolithic integration of InGaAsP/InP distributed feedback laser and electroabsorption modulator by vapor phase epitaxy", IEEE J. Lightwave Technol., Vol.LT-5, No.9, pp.1277-1285, Sept. 1987.
- [87TOB] H. Toba, K. Oda, N. Takato and K. Nosu, "5 GHz-spaced, eight-channel, guided-wave tunable multi/demultiplexer for optical FDM transmission systems", Electron. Lett., Vol.23, No.15, pp.788-789, July 1987.
- [87TOH] Y. Tohmori, K. Komori, S. Arai and Y. Suematsu, "1.5-1.6 μm GaInAsP/InP bundle-integrated-guide (BIG) distributed-Bragg-reflector (DBR) lasers", Trans. IEICE Japan, Vol.E70, No.5, pp.494-503, May 1987.
- [87VOG] E. Voges and A. Neyer, "Integrated-optic devices on LiNbO_3 for optical communication", IEEE/OSA J. Lightwave Technol., Vol.LT-5, No.9, pp.1229-1238, Sept. 1987.
- [87YAB] E. Yablonovitch, "Inhibited spontaneous emission in solid-state physics and electronics", Phys. Rev. Lett., Vol.58, pp.2059-2062, 1987.
- [87YAM] M. Yamada, M. Ohki and H. Yamamoto, "Proposal and analysis of an integrated laser with external

- injection of spontaneous emission", Trans. IECE Japan, Vol.E69, pp.973-979, 1987.
- [87ZHU] X. Zhu and K. Iga, "Index profiling of distributed-index lenses by a total reflection method", Electron. Lett., Vol.23, No.12, pp.626-627, June 1987.
- [88BAB] T. Baba, Y. Kokubun, T. Sakaki and K. Iga, "Loss reduction of ARROW waveguide in shorter wavelength and its stack configuration", IEEE J. Lightwave Technol., Vol.LT-6, No.9, pp.1440-1445, Sept. 1988.
- [88BRO] B. Broberg and S. Nilsson, "Widely tunable integrated Bragg lasers", Conf. on Lasers and Electro-optics (CLEO '88), Anaheim (U.S.A.), MB2, Apr. 1988.
- [88FUJ] S. Fujita, N. Henmi, I. Takano, M. Yamaguchi, T. Torikai, T. Suzaki, S. Takano, H. Ishihara and M. Shikada, "A 10 Gb/s-80 km optical transmission experiment using a directly modulated DFB-LD and a high speed InGaAs-APD", OFC'88 (New Orleans), Post-Deadline Paper, PD16, Jan. 1988.
- [88IGA] K. Iga, F. Koyama and S. Kinoshita, "Surface emitting semiconductor laser", IEEE J. Quantum Electron., Vol.QE-24, No.9, pp.1845-1855, Sept. 1988.
- [88KOC] T. L. Koch, U. Koren, R. P. Gnall, C. A. Burrus and B. I. Miller, "Continuously tunable 1.5 μm multiple-quantum-well GaInAs/GaInAsP distributed-Bragg-reflector lasers", Electron. Lett., Vol.24, No.23, pp.1431-1433, Nov. 1988.
- [88KOT] Y. Kotaki, M. Matsuda, H. Ishikawa and H. Imai, "Tunable DBR laser with wide tuning range", Electron. Lett., Vol.24, No.8, pp.503-505, Apr. 1988.
- [88KOYa] F. Koyama and K. Iga, "Frequency chirping of external modulators", IEEE J. Lightwave Technol., Vol.LT-6, No.1, pp.87-93, Jan. 1988.
- [88KOYb] F. Koyama, S. Kinoshita and K. Iga, "Room-temperature cw operation of GaAs vertical cavity surface emitting laser", Trans. IEICE Japan, Vol.E71, No.11, pp.1089-1090, Dec. 1988.
- [88MUR] S. Murata, I. Mito and K. Kobayashi, "Tuning ranges for 1.5 μm wavelength tunable DBR lasers", Electron. Lett., Vol.24, No.10, pp.577-578, May 1988.
- [88NIS] H. Nishimoto, T. Okiyama, N. Kuwata, Y. Arai, A. Miyaichi and T. Touge, "New method of analyzing eye patterns and its application to high-speed optical transmission systems", IEEE J. Lightwave Technol., Vol.LT-6, No.5, pp.678-685, May 1988.
- [88SAK] T. Sakaguchi, F. Koyama and K. Iga, "Vertical cavity surface emitting laser with and AlGaAs/AlAs Bragg reflector", Electron. Lett., Vol.24, pp.928-929, July 1988.
- [88SMI] M. K. Smit, "New focusing and dispersive planar component based on an optical phased array", Electron. Lett., Vol.24, No.7, pp.385-386, 1988.
- [88SNI] E. Snitzer, H. Po, F. Hakimi, R. Tumminelli and B. C. McCollum, Optical communication conference, Tech. Digest Series, Vol.1.1 (Optical Society of America, Washington, DC), PD2, 1988.
- [88SUZa] M. Suzuki, H. Tanaka and S. Akiba, "High-speed characteristics at high input optical power of GaInAsP electroabsorption modulators", Electron. Lett., Vol.24, No.20, pp.1272-1273, Sept. 29, 1988.
- [88SUZb] N. Suzuki, H. Furuyama, Y. Hirayama, M. Morinaga, E. Eguchi, M. Kushibe, M. Funamizu and M. Nakamura, "High-speed operation of 1.5 μm GaInAsP/InP optoelectronic integrated laser drivers", Electron. Lett., Vol.24, No.8, pp.467-468, Apr. 14, 1988.
- [88TAK] S. Takano, T. Sasaki, H. Yamada, M. Kitamura and I. Mito, "Spectral linewidth reduction by MOVPE grown 1.5 μm SCH quantum well DFB LDs", The 11th IEEE Int. Semicon. Laser Conf., Boston (U.S.A.), Q-1, pp.192-193, Aug. 1988.
- [88TAM] T. Tamir, ed., "Guided-wave optoelectronics", Springer-Verlag, Berlin, 1988.
- [88YAM] S. Yamamoto, H. Sakaguchi, M. Nunokawa and Y. Iwamoto, "1.55 μm fiber-optic transmission

- experiment for long-span submarine cable system design", IEEE J. Lightwave Technol., Vol.LT-6, No.3, pp.380-391, Mar. 1988.
- [89AMA] H. Amano, M. Kito, K. Hiramatsu and I. Akasaki, "P-type conduction in Mg-doped GaN treated with low-energy electron beam irradiation (LEEBI)", Jpn. J. Appl. Phys., Vol.28, p.L2112-L2114, 1989.
- [89EDA] N. Edagawa, Y. Yoshida, H. Taga, S. Yamamoto, K. Mochizuki and H. Wakabayashi, "904 km, 1.2 Gbit/s non-regenerative optical transmission experiment using 12 Er-doped fibre amplifiers", ECOC'89, Post-Deadline Paper, PDA-9, Sept. 1989.
- [89EIS] G. Eisenstein, U. Koren, T. L. Koch, G. Raybon, R. S. Tucker and B. I. Miller, "A multiple quantum well optical amplifier/modulator integrated with a tunable DBR laser", The 7th Int. Conf. on Integrated Optics and Optical Fiber Commun. (IOOC '89), Kobe (Japan), 19C2-3, July 1989.
- [89GIL] C. R. Gile, E. Desryvre, J. R. Talman, J. R. Simpson and P. C. Becker, "2 Gbit/s signal amplification at 1.53 μm in an erbium-doped single-mode fiber amplifier", IEEE J. Lightwave Technol., Vol.LT-7, pp.651-656, 1989.
- [89GNA] A. H. Gnauk, R. M. Jopson, J. D. Evankow, C. A. Burrus, A. J. Wang, N. K. Dutta and H. M. Presby, "16 Gbit/s, 64 km optical fiber transmission experiment using an optical preamplifier receiver", ECOC'89, Post-Deadline Paper, PDA-6, Sept. 1989.
- [89IZU] M. Izutsu and T. Sueta, "Ten GHz LiNbO₃ waveguide modulators", IOOC '89, Kobe (Japan), 2, 19D4-1, pp.170-171, July 1989.
- [89JEW] J. L. Jewell, A. Scherer, S. L. McCall, Y. H. Lee, S. J. Walker, J. P. Harbison and L. T. Florez, "Low threshold electrically-pumped vertical-cavity surface-emitting micro-lasers", Electron. Lett., Vol.25, pp.1123-1124, 1989.
- [89KAS] A. Kasukawa, I. J. Murgatroyd, Y. Imajo, H. Okamoto and S. Kashiwa, "Effect of well number in 1.3 μm GaInAsP graded index separate confinement heterostructure multiple quantum well (GRIN-SCH MQW) lasers", The 7th Int. Conf. on Integrated Optics and Optical Fiber Commun. (IOOC'89), 20B1-4, Kobe (Japan), July 1989.
- [89KOT] I. Kotaka, K. Wakita, O. Mitomi, H. Asai and Y. Kawamura, "High-speed InGaAlAs/InAlAs multiple quantum well optical modulators with bandwidths in excess of 20 GHz at 1.55 μm ", IEEE Photonics Technol. Lett., Vol.1, No.5, pp.100-101, May 1989.
- [89KOY] F. Koyama, S. Kinoshita and K. Iga, "Room-temperature continuous wave lasing characteristics of GaAs vertical cavity surface-emitting laser", Appl. Phys. Lett., Vol.55, No.3, pp.221-222, July 17, 1989.
- [89NAK] M. Nakazawa, Y. Kimura and K. Suzuki, "Efficient Er³⁺-doped optical fiber amplifier pumped by a 1.48 μm InGaAsP laser diode", Appl. Phys. Lett., Vol.54, No.4, pp.295-297, 23 Jan. 1989.
- [89RIG] A. Righetti, F. Fontana, G. Delrosso, G. Grasso, M. Z. Iqbal, J. L. Gimlett, R. D. Standley, J. Young and N. K. Cheung, "An 11 Gbit/s, 260 km transmission experiment using a directly-modulated 1536 nm DFB laser with two Er-doped fiber amplifiers and clock recovery", ECOC'89, Post-Deadline Paper, PDA-10, Sept. 1989.
- [89SOD] H. Soda, M. Furutsu, K. Sato, N. Okazaki, S. Yamazaki, I. Yokota, T. Okiyama, H. Nishimoto and H. Ishikawa, "High-power semi-insulating BH monolithic electro-absorption modulator/DFB laser light source operation 10 Gb/s", IOOC'89 (Kobe), 5, 20PDB-5, pp.46-47, July 1989.
- [89SUE] Y. Suematsu, "Long wavelength optical fiber communication", Proc. IEEE, Vol.71, No.6, pp.692-721, June 1989.
- [89SUZ] M. Suzuki, H. Tanaka, M. Usami, H. Taga and Y. Matsushima, "S.I.-InP integrated light source and 2.4 Gb/s-118 km penalty-free conventional fiber transmission", The 7th Int. Conf. on Integrated

- Optics and Optical Fiber Commun. (IOOC '89), Kobe (Japan), 20PDB-3, July 1989.
- [89UOM] K. Uomi, H. Nakano and N. Chinone, "Ultra-high speed (17 GHz) 1.55 μm $\lambda/4$ -shifted DFB lasers and proposal on reducing damping phenomenon for higher speed modulation", The 7th Int. Conf. on Integrated Optics and Optical Fiber Commun. (IOOC'89), 19C2-4, pp.120-121, Kobe (Japan), July 1989.
- [89WAD] O. Wada, "Progress of OEIC", IOOC'89, 20C3-3, pp.162-163, Kobe, Japan, July 1989.
- [90HO] K. M. Ho, C. T. Chan and C. M. Soukoulis, "Existence of a photonic gap in periodic dielectric structures", Phys. Rev. Lett., Vol.65, pp.3152-3155, 1990.
- [90KAW] M. Kawachi, "Silica waveguides on silicone and their application to integrated-optic components", Opt. & Quantum Electron., Vol.22, pp.391-416, 1990.
- [90LEU] K. M. Leung and Y. F. Liu, "Full vector wave calculation of photonic band structures in face-centered-cubic dielectric media", Phys. Rev. Lett., Vol.65, pp.2646-2649, 1990.
- [90NAK] M. Nakazawa, K. Suzuki, H. Kubota, E. Yamada and Y. Kimura, "Dynamic optical soliton communication", IEEE J. Quantum Electron., Vol.26, No.12, pp.2095-2102, 1990.
- [90TAK] H. Takahashi, S. Suzuki, K. Katoh and I. Nishi, "Arrayed waveguide grating for wavelength division multi/demultiplexer with nanometer resolution", Electron. Lett., Vol.26, No.2, pp.87-88, 1990.
- [90THI] P. J. A. Thijs, E. A. Montie, T. van Dongen and C. W. T. Bulle-Lieuwma, "Improved 1.5 μm wavelength lasers using high quality LP-OMVPE grown strained-layer InGaAs quantum wells", J. Cryst. Growth, Vol.105, pp.339-347, 1990.
- [90WIN] J. H. Winters and R. D. Gitlin, "Electric signal processing techniques in long-haul fiber-optic systems", IEEE Trans. Commun., Vol.38, No.9, pp.1439-1453, Sep. 1990.
- [90YAM] N. Yamagata and Y. Kokubun, "Low-loss spotsize transformer by dual tapered waveguides (DTW-SST)", IEEE J. Lightwave Technol., Vol.LT-8, No.4, pp.587-593, Apr. 1990.
- [90ZUC] J. E. Zucker, K. L. Jones, B. L. Miller, U. Koren, "Miniature Mach-Zehnder InGaAsP quantum well waveguide interferometers for 1.3 μm ", IEEE Photonics Technol. Lett., Vol.2, No.1, pp.32-34, Jan. 1990.
- [91AOK] M. Aoki, H. Sano, M. Suzuki, M. Takahashi, K. Uomi and A. Takai, "Novel structure MQW electroabsorption modulator/DFB-laser integrated device fabricated by selective area MOCVD growth", Electron. Lett., Vol.27, No.23, pp.2138-2140, Nov. 1991.
- [91DRA] C. Dragone, "An $N \times N$ optical multiplexer using a planar arrangement of two star couplers", IEEE Photonics Technol. Lett., Vol.3, No.9, pp.812-815, 1991.
- [91YAB] E. Yablonovitch, T. J. Gmitter, R. D. Meade, A. M. Rappe, K. D. Brommer and J. D. Joannopoulos, "Donor and acceptor modes in photonic band structure", Phys. Rev. Lett., Vol.67, pp.3380-3383, 1991.
- [92GOP] G. K. Gopalakrishnan, C. H. Bulmer, W. K. Burns, R. W. McElhanon and A. S. Greenblatt, "40 GHz, low half-wave voltage Ti:LiNbO₃ intensity modulator", Electron. Lett., Vol.28, No.9, pp.826-827, 1992.
- [92NAG] R. Nagarajan, M. Ishikawa, J. E. Bowers, "Effects of carrier transport on relative intensity noise and critique of K factor predictions of modulation response", Electron. Lett., Vol.28, No.9, pp.846-848, April 1992.
- [92NAK] 中川清司, 中沢正隆, 相田一夫, 萩本和男, "光増幅器とその応用", オーム社, 東京, 1992.
- [92SUZ] S. Suzuki, K. Shuto and Y. Hibino, "Integrated optic ring resonators with two stacked layers of silica waveguides on Si", IEEE Photonics Technol. Lett., Vol.4, No.11, pp.1256-1258, Nov. 1992.
- [92TAK] H. Takahashi, I. Nishi, Y. Hibino, "10 GHz spacing optical frequency division multiplexer based on

- arrayed-waveguide grating”, *Electron. Lett.*, Vol.28, pp.380-382, 1992.
- [92YAM] 山下一郎, 川瀬正明, 太田紀久, “光アクセス方式”, マルチメディアネットワークシリーズ, オーム社, 東京, 1992.
- [94FAI] J. Faist, F. Cappaso, D. L. Sivco, C. Sirtori, A. L. Hutchinson and A. Y. Cho, “Quantum cascade lasers”, *Science*, Vol.264, pp.553-556, 1994.
- [94IGAa] 伊賀健一編著, “半導体レーザ”, 応用物理学シリーズ, オーム社, 東京, 1994.
- [94IGAb] K. Iga, “Fundamentals of Laser Optics”, Plenum, New York, 1994.
- [94KOY] 小山二三夫, “半導体レーザ”, 応用物理学シリーズ, 伊賀健一編著, 第7章, オーム社, 東京, 1994.
- [94NAK] S. Nakamura, K. Tajima and Y. Sugimoto, “Experimental investigation on high-speed switching characteristics of a novel symmetric Mach-Zehnder all-optical switch”, *Appl. Phys. Lett.*, Vol.65, No.3, pp.283-285, 1994.
- [94ONI] M. Onishi, Y. Koyano, M. Shigematsu, H. Kanamori and M. Nishimura, “Dispersion compensating fiber with a high figure of merit of 250 ps/nm/dB”, *Electron. Lett.*, Vol.30, No.2, pp.161-163, 1994.
- [94SHO] P. Shor, “Algorithms for Quantum Computation: Distance Logarithms and Factoring”, *Proc. of 35th Annual Symp. on the Theory of Computer Science*, p.124, 1994.
- [94SUE] Y. Suematsu and A. R. Adams, eds., “Handbook of semiconductor lasers and photonic integrated circuits”, Chapman & Hall, London 1994.
- [95AGR] G. P. Agrawal, “Nonlinear fiber optics”, Academic Press, New York, 1995.
- [95BIR] T. A. Birks, P. J. Roberts, P. St. J. Russel, D. M. Atkin and T. J. Sheperd, “Full 2-D bandgaps in silica/air structures”, *Electron. Lett.*, Vol.31, No.22, pp.1941-1943, 1995.
- [95JOA] J. D. Joannopoulos, R. D. Meade and J. N. Winn, “Photonic Crystals - Molding the Flow of Light, Princeton”, Princeton Univ. Press, 1995.
- [95KUG] Y. Kuga, T. Shirai, M. Haruyama, H. Kawanishi and Y. Suematsu, “Violet and near-UV light emission from GaN/Al_{0.08}Ga_{0.92}N injection diode grown on (0001) 6H-SiC substrate by low-pressure metal-organic vapor phase epitaxy”, *Jpn. J. Appl. Phys.*, Vol.34-1, No.84, pp.4085-4088, Aug. 1995.
- [95NAK] M. Nakazawa and H. Kubota, “Optical soliton communication in a positively and negatively dispersion-allocated optical fibre transmission line”, *Electron. Lett.*, Vol.31, No.3, pp.216-217, 1995.
- [95SHI] 島田禎晉監修, 河西宏之, 榎一光, 辻久雄, “SDH 伝送方式”, マルチメディアネットワークシリーズ, オーム社, 東京, 1995.
- [95SUZ] M. Suzuki, I. Morita, N. Edagawa, S. Yamamoto, H. Taga and S. Akiba, “Reduction of Gordon-Haus timing jitter by periodic dispersion compensation in soliton transmission”, *Electron. Lett.*, Vol.31, pp.2027-2029, Nov. 1995.
- [96CHA] A. R. Charaplyvy, A. H. Gnauck, R. W. Tkach, J. L. Zyskind, J. W. Sulhoff, A. J. Lucero, Y. Sun, R. M. Jopson, F. Forghieri, R. M. Derosier, C. Wolf and A. R. McCormick, “1 Tb/s transmission experiment”, *IEEE Photonics Technol. Lett.*, Vol.8, No.9, pp.1264-1266, 1996.
- [96IGAa] K. Iga and S. Kinoshita, “Process technology for semiconductor lasers”, Springer, Heidelberg, 1996.
- [96IGAb] K. Iga, “Vertical cavity surface emitting lasers based on InP and related compounds-Bottleneck and corkscrew”, *Conf. Indium Phosphide and Related Materials, Schwabisch Gmund, Germany, Invited Talk*, Apr. 1996.
- [96KNI] J. C. Knight, T. A. Birks, P. St. J. Russel and D. M. Atkin, “All-silica single-mode optical fiber with photonic crystal cladding”, *Opt. Lett.*, Vol.21, No.19, pp.1547-1549, 1996.
- [96KON] M. Kondow, K. Uomi, A. Niwa, T. Kitatani, S. Watahiki and Y. Yazawa, “GaInNAs: A Novel Material

- for Long-Wavelength-Range Laser Diodes with Excellent High-Temperature Performance”, Jpn. J. Appl. Phys., Vol.35-2B, pp.1273-1275, Feb. 1996.
- [96KRA] T. F. Krauss, R. M. De La Rue and S. Brand, “Two-dimensional photonic-bandgap structures operating at near-infrared wavelengths”, Nature, Vol.283, pp.699-702, 1996.
- [96MEK] A. Mekis, J. C. Chen, I. Kurand, S. Fan, P. R. Villeneuve and J. D. Joannopoulos, “High transmission through sharp bends in photonic crystal waveguides”, Phys. Rev. Lett., Vol.77, pp.3787-3790, 1996.
- [96NAK] S. Nakamura, M. Senoh, S. Nagahama, N. Iwasa, T. Yamada, T. Matsushita, H. Kiyoku and Y. Sugimoto, “InGaN-based multi-quantum-well-structure laser diodes”, J. Appl. Phys., Vol.35, pp.L74-76, 1996.
- [97BAB] T. Baba, “Photonic crystals and microdisk cavities based on GaInAsP/InP system”, IEEE J. Selected Topics in Quantum Electron., Vol.3, pp.808-830, 1997.
- [97HAG] S. C. Hagness, D. Rafizadeh, S. T. Ho and A. Taflove, “FDTD microcavity simulations: design and experimental realization of waveguide-coupled single-mode ring and whispering-gallery-mode disk resonators”, IEEE/OSA J. Lightwave Technol., Vol.15, No.11, pp.2154-2165, Nov. 1997.
- [97ITA] Y. Itaya, Y. Tohmori, M. Wada and H. Fukao, “Spot-size converters integrated laser diodes”, OECC'97, 1997.
- [97KOI] 小池康博, “プラスチック光ファイバ”, 共立出版, 東京, 1997.
- [97LIT] B. E. Little, S. T. Chu, H. A. Haus, J. Foresi and J.-P. Laine, “Microring resonator channel dropping filters”, IEEE/OSA J. Lightwave Technol., Vol.15, No.6, pp.998-1005, June 1997.
- [97RAF] D. Rafizadeh, J. P. Zhang, S. C. Hagness, A. Taflove, K. A. Stair, S. T. Ho and R. C. Tiverio, “Waveguide-coupled AlGaAs/GaAs microcavity ring and disk resonators with high finesse and 21.6 nm free spectral range”, Opt. Lett., Vol.22, No.16, pp.1244-1246, Aug. 1997.
- [97SAT] 佐藤健一, 鳥羽弘, “光波ネットワークの技術動向”, 信学誌, Vol.80, No.9, pp.947-959, 1997.
- [97TAG] H. Taga, K. Imai, N. Takeda, S. Yamamoto and S. Akiba, “Two 21×5 Gbit/s, 9500 km transmission experiment using densely-spaced WDM channel and 980 nm pumped EDFA”, Electron. Lett., Vol.33, No.8, Apr. 10, 1997.
- [98KOS] H. Kosaka, T. Kawashima, A. Tomita, M. Notomi, T. Tamamura, T. Sato and S. Kawakami, “Superprism phenomena in photonic crystals”, Phys. Rev. B, Vol.58, pp.10096-10099, 1998.
- [98LIN] S. Y. Lin, J. G. Fleming, D. L. Hetherington, B. K. Smith, R. Biswas, K. M. Ho, M. M. Sigalas, W. Zubrzycki, S. R. Kurtz and J. Bur, “A three-dimensional photonic crystal operating at infrared wavelengths”, Nature, Vol.394, pp.251-253, 1998.
- [98LIT] B. E. Little, J. S. Foresi, G. Steinmeyer, E. R. Thoen, S. T. Chu, H. A. Haus, E. P. Ippen, L. C. Kimerling and W. Greene, “Ultra-compact Si/SiO₂ microring resonator optical channel dropping filters”, IEEE Photonics Technol. Lett., Vol.10, No.4, pp.549-551, Apr. 1998.
- [98MOR] I. Morita, M. Suzuki, N. Edagawa, K. Tanaka, S. Yamamoto, “40 Gbits/s single-channel soliton transmission using periodic dispersion compensation”, IEICE Trans. Electron., Vol.E81-C, pp.1309-1315, Aug. 1998.
- [98NAK] M. Nakazawa, E. Yoshida, T. Yamamoto, E. Yamada and A. Sahara, “TDM single channel 640 Gbit/s transmission experiment over 60 km using 400 fs pulse train and walk-off free, dispersion flattened nonlinear optical loop mirror”, Electron. Lett., Vol.34, No.9, pp.907-908, 1998.
- [98SUZ] M. Suzuki, H. Kidorf, N. Edagawa, H. Taga, N. Takeda, K. Imai, I. Morita, S. Yamamoto, E. Shibano, T. Miyakawa, E. Nazuka, M. Ma, F. Kerfoot, R. Maybach, H. Adelman, V. Arya, C. Chen, S. Evangelides, D. Gray, B. Petersen, A. Puc, “170 Gb/s Transmission Over 10,850 km Using Large

- Core Transmission Fiber”, Optical Fiber Conference (OFC'98), PD17-1, 1998.
- [98WIJ] J. E. G. J. Wijnhoven and W. L. Vos, “Preparation of photonic crystals made of air spheres in titania”, Science, Vol.281, pp.802-804, 1998.
- [99BAB] T. Baba, N. Fukaya and J. Yonekura, “Observation of light propagation in photonic crystal optical waveguides with bends”, Electron. Lett., Vol.35, pp.654-655, 1999.
- [99CHU] S. T. Chu, B. E. Little, W. Pan, T. Kaneko, S. Sato and Y. Kokubun, “An eight-channel add-drop filter using vertically coupled microring resonators over a cross grid”, IEEE Photonics Technol. Lett., Vol.11, No.6, pp.691-693, June 1999.
- [99KIT] K. Kitayama and N. Wada, “Photonic IP routing”, IEEE Photonics Technol. Lett., Vol.11, No.12, pp.1689-1691, 1999.
- [99LIT] B. E. Little, S. T. Chu, W. Pan, D. Ripin, T. Kaneko, Y. Kokubun and E. Ippen, “Vertically coupled glass microring resonator channel dropping filters”, IEEE Photonics Technol. Lett., Vol.11, No.2, pp.215-217, Feb. 1999.
- [99PAI] O. Painter, R. K. Lee, A. Scherer, A. Yariv, J. D. O'Brien, P. D. Dapkus and I. Kim, “Two-dimensional photonic band-gap defect mode laser”, Science, Vol.284, pp.1819-1821, 1999.
- [99SUG] N. Sugimoto, T. Shintaka, T. Tata, H. Terai, M. Shimokozono, E. Kuroda, M. Ishii and Y. Inoue, “Waveguide polarization-independent optical circulator”, IEEE Photonics Technol. Lett., Vol.11, pp.355-357, 1999.
- [99VES] L. Vestergaard Hau, S. E. Harris, Z. Dutton and C. H. Behroozi, “Light speed reduction to 17 metres per second in an ultracold atomic gas”, Nature, Vol.397, pp.594-598, Feb. 1999.
- [99YON] J. Yonekura, M. Ikeda and T. Baba, “Analysis of finite 2-D photonic crystals of columns and lightwave devices using the scattering matrix method”, IEEE J. Lightwave Technol., Vol.17, pp.1500-1508, 1999.
- [00AOK] 青木利晴, “デジタル通信”, 信学誌, Vol.83, No.1, pp.26-28, Jan. 2000.
- [00CAP] F. Cappaso, C. Gmachl, R. Paiella, A. Tredicucchi, A. L. Hutchinson, D. L. Sivco, J. N. Baillargeon and A. Cho, “New frontiers in quantum cascade lasers and applications”, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.931-947, Nov./Dec. 2000.
- [00COL] L. A. Coldren, “Monolithic Tunable Diode Lasers”, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.988-999, 2000.
- [00DAI] P. Dainesi, A. Kung, M. Chabloz, A. Lagos, P. Fluckiger, A. Ionescu, P. Fazan, M. Declercq, P. Renaud and P. Robert, “CMOS compatible fully integrated Mach-Zehnder interferometer in SOI technology”, IEEE Photonics Technol. Lett., Vol.12, No.6, pp.660-662, June 2000.
- [00EGG] R. J. Eggleton, et al., IEEE J. Lightwave Technol., Vol.18, pp.1. 418-1432, 2000.
- [00HAS] A. Hasegawa, “Soliton-Based Optical Communications : An Overview”, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1161-1172, 2000.
- [00HAU] H. A. Haus, “Mode-Locking of Lasers”, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1173-1185, 2000.
- [00IGA] K. Iga, “Vertical cavity surface emitting laser - Its birth and generation of new optoelectronics field”, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1201-1215, Nov./Dec., 2000.
- [00KOK] 國分泰雄, “光導波路”, 共立出版, 東京, 2000.
- [00LED] N. Ledentsov, M. Grundmann, F. Heinrichsdorff, D. Bimberg, V. Ustinov, A. Zhukov, M. Maximov, Zh. Alferov and J. Lott, “Quantum-dot heterostructure lasers”, IEEE J. Selected Topics in Quantum Electron., Vol.6, pp.439-451, 2000.

- [00MOR] G. Morthier, R. Schatz and O. Kjebon, "Extended modulation bandwidth of DBR and external cavity lasers by utilizing a cavity resonance for equalization" IEEE J. Quantum Electron., Vol.36, No.12, pp.1468-1475, Dec. 2000.
- [00NAK] M. Nakazawa, "Soliton for breaking barriers to terabit/second WDM and OTDM transmission in the next millennium", IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1332-1343, 2000.
- [00NODa] S. Noda, K. Tomoda, N. Yamamoto and A. Chutinan, "Full three-dimensional photonic bandgap crystals at near-infrared wavelengths", Science, Vol.289, pp.604-606, 2000.
- [00NODb] S. Noda, A. Chutinan and M. Imada, "Trapping and emission of photons by a single defect in a photonic bandgap structure", Nature, Vol.407, pp.608-610, 2000.
- [00NOT] M. Notomi, "Theory of light propagation in strongly-modulated photonic crystals : refraction-like behavior in the vicinity of the photonic band gap", Phys. Rev. B, Vol.62, p.10696, 2000.
- [00NUN] N. Nunoya, H. Yasumoto, H. Midorikawa, S. Tamura and S. Arai, "low threshold current density operation of GaInAsP/InP lasers with strain-compensated multiple-layered wirelike active regions", Jpn. J. Appl. Phys., Vol.39, pp.L1042-L1045, 2000.
- [00PEN] J. B. Pendry, "Negative refraction makes a perfect lens", Phys. Rev. Lett., Vol.85, pp.3966-3969, 2000.
- [00SAR] M. Saruwatari, "All-optical signal processing for terabit/second optical transmission", IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1363-1374, 2000.
- [00SPE] Special Issue on Semiconductor Laser, IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1201-1215, Nov./Dec., 2000.
- [00SUE] Y. Suematsu and S. Arai, "Single-mode semiconductor lasers for long-wavelength fiber communications and dynamics of semiconductor lasers", IEEE J. Selected Topics in Quantum Electron., Vol.6, No.6, pp.1436-1449, 2000.
- [00SUZ] M. Suzuki and K. Sakai, "Recent progress of wavelength division multiplexing technology in terabit/s transoceanic undersea cable systems", Optical Review, Vol.7, pp.1-8, Jan. 2000.
- [01FUK] K. Fukuchi, T. Kasamatsu, M. Morie, R. Ohhira, T. Ito, K. Sekiya, D. Ogasawara and T. Ono, "10.92 Tb/s (273×40 Gb/s) triple-band/ultra-dense WDM optical-repeated transmission experiment", OFC2001, PD24-1-PD24-3, 2001.
- [01KAG] T. Kageyama, T. Miyamoto, S. Makino, Y. Ikenaga, N. Nishiyama, A. Matsutani, F. Koyama and K. Iga, "Room temperature continuous-wave operation of GaInNAs/GaAs VCSELs grown by chemical beam epitaxy with output power exceeding 1 mW", Electron. Lett., Vol.37, No.4, pp.225-226, Feb., 2001.
- [01KIN] G. S. Kinsey, et al., "Waveguide Avalanche Photodiode Operating at $1.55 \mu\text{m}$ with a Gain-Bandwidth Product of 320 GHz", IEEE Photonics Technol. Lett., Vol.13, pp.842-844, Aug. 2001.
- [01NOT] M. Notomi, K. Yamada, A. Shinya, J. Takahashi, C. Takahashi and I. Yokohama, "Extremely large group velocity dispersion of line-defect waveguides in photonic crystal slabs", Phys. Rev. Lett., Vol.87, No.253902, p.p.4, Aug. 7, 2001.
- [01SAI] H. Saito, K. Nishi, A. Kamei and S. Sugou, Appl. Phys. Lett., Vol.78, p.267, 2001.
- [01VLA] Y. A. Vlasov, X-Z. Bo, J. C. Sturm and D. J. Norris, "On-chip natural assembly of silicon photonic bandgap crystals", Nature, Vol.414, pp.289-293, 2001.
- [02BAC] H. G. Bach, et al., "Design and fabrication of 60 Gb/s inp-based monolithic photoreceiver OEICS and modules", IEEE J. Selected Topics in Quantum Electron., Vol.8, pp.1445-1450, Nov./Dec. 2002.
- [02SAN] C. Santori, D. Fattal, J. Vuckovic, G. S. Solomon and Y. Yamamoto, "Indistinguishable Photons from

- a Single-Photon Device”, *Nature*, Vol.419, pp.594-597, Oct. 2002.
- [02TUR] A. V. Turukhin, V. S. Sudarshanam, M. S. Shahriar, J. A. Musser, B. S. Ham and P. R. Hemmer, “Observation of ultraslow and stored light pulses in a solid”, *Phys. Rev. Lett.*, Vol.88, pp.023602-1-4, Jan. 2002.
- [03CHA] C. J. Chang-Hasnain, P. Ku, J. Kim, and S. L. Chuang, “Variable optical buffer using slow light in semiconductor nanostructure”, *Proc. IEEE*, Vol.91, No.11, pp.1884-1897, Nov. 2003.
- [03HIK] 光情報通信技術ハンドブック編集委員会編, “光情報通信技術ハンドブック”, コロナ社, 東京, 2003.
- [03NAG] 長澤正雄, “シュレーディンガーのジレンマと夢”, 森北出版, 東京, 2003.
- [03RUS] P. Russell, “Photonic crystal fibers”, *Science*, Vol.299, pp.358-362, 2003.
- [03WAD] N. Wada, H. Harai and F. Kubota, “40 Gbit/s Interface, optical code based photonic packet switch prototype”, *OFC2003*, Vol.2, FS7, pp.801-802, 2003.
- [04FAT] D. Fattal, E. Diamanti, K. Inoue and Y. Yamamoto, “Quantum Teleportation with a Quantum Dot Single Photon Source”, *Phys. Rev. Lett.*, Vol.92, pp.037904-1-037904-4, Jan. 2004.
- [04GNA] A. H. Gnauck and P. J. Winzer, “Phase-shift-keyed transmission”, *OFC2004*, TuF5, 2004.
- [04IBL] S. Iblisdir, G. Van Assche and Z. J. Cerf, “Security of Quantum Key Distribution with Coherent States and Homodyne Detection”, *Phys. Rev. Lett.*, Vol.93, p.170502, 2004.
- [04KU] P. C. Ku, F. Sedwick, C. J. Chang-Hasnain, P. Palinginia, T. Li, H. L. Wang, S. W. Chang and S. L. Chuang, “Slow light in semiconductor quantum wells”, *Opt. Lett.*, Vol.29, pp.2291-2293, Oct. 2004.
- [04MIY] K. Miyake et al., *ECOC 2004*, Mo3.3.4, 2004.
- [04SEK] K. Sekine, N. Kikuchi, S. Sasaki, S. Hayase, C. Hasegawa and T. Sugawara, “Proposal and demonstration of 10-Gsymbol/sec 16-ary (40 Gbit/s) optical modulation/demodulation scheme”, *ECOC2004*, Vol.3, We3.4.5, pp.424-425, 2004.
- [04TAK] T. Takano, Y. Narita, A. Horiuchi and H. Kawanishi, “Room-temperature deep-ultraviolet lasing at 241.5 nm of AlGaIn multiple-quantum-well laser”, *Appl. Phys. Lett.*, Vol.89, No.18, pp.3567-3569, 2004.
- [05BAB] T. Baba, “Photonic crystals”, in [05IGA] p.289, 2005.
- [05CHR] L. Chrostowski, X. Zhao, C. J. Chang-Hasnain, R. Shau, M. Ortsiefer and M. Amann, “50 GHz directly-modulated injection-locked 1.55 μm VCSELs”, *OFC/NFOEC*, 4, pp.338-340, Mar. 2005.
- [05COR] E. Corndrof, P. Kumar and H. P. Yuen, “Quantum noise randomized data encryption for WDM fiber optic networks”, *Phys. Rev. A*, Vol.71, 062326, June, 2005.
- [05DUA] N. Duan, et al., “High-speed and low-noise SACM avalanche photodiodes with an impact-ionization-engineered multiplication region”, *IEEE Photonics Technol. Lett.*, Vol.17, pp.1719-1721, Aug. 2005.
- [05HIR] O. Hirota, M. Sohma, M. Fuse and K. Kato, “Quantum stream cipher by the Yuen 2000 protocol”, *Phys. Rev. A*, Vol.72, 022335, Aug. 2005.
- [05IGA] K. Iga and Y. Kokubun, “Encyclopedic handbook on integrated optics”, Taylor and Francis (CRC Publication), 2005.
- [05INO] 井上友二, “レゾナントコミュニケーション環境の創造に向けた研究開発”, *NTT 技術ジャーナル*, Vol.17, No.4, pp.16-25, 2005.
- [05KON] A. Kondo, T. Ishigure and Y. Koike, “Fabrication process and optical properties of perdeuterated graded-index polymer optical fiber”, *IEEE J. Lightwave Technol.*, Vol.23, No.8, pp.2443-2448, 2005.
- [05MCG] D. McGhan, C. Laperle, A. Savchenko, L. Chuandong, M. Gary, M. O'Sullivan, “5120 km RZ-DPSK transmission over G652 fiber at 10 Gb/s with no optical dispersion compensation”, *Optical Fiber*

Communication Conference, Technical Digest, Vol.6, pp.79-81, March 2005.

- [05MIY] T. Miyazawa, K. Takemoto, Y. Sakuma, S. Hirose, T. Usuki, N. Yokozawa, M. Takatsu and Y. Arakawa, "Single-Photon generation in the 1.55 μ m Optical-Fiber Band from an InAs/InP Quantum Dot", Jpn. J. Appl. Phys., Vol.44, No.20, pp.L620-622, 2005.
- [05NAG] T. Naganawa, S. Ueno, Y. Kokubun, "Spectrum response improvement of higher-order series coupled microring resonator filter by UV trimming", IEEE Photonics Technol. Lett., Vol.17, No.10, pp.2104-2106, Oct. 2005.
- [05SHI] 清水大雅, 中野義昭, "Fabrication of a TE mode Semiconductor Waveguide type Optical Isolator Based on the Nonlinear Loss shift", 2004 Fall meeting of Material Research Society, Jan. 2005.
- [05WAD] 和田紀夫, "新たなブロードバンド社会の実現に向けた取り組み", NTT 技術ジャーナル, Vol.17, No.4, pp.6-15, 2005.
- [05WAK] 若林信一, 「FBG を用いた広帯域可変分散補償デバイス」, オプトエレクトロニクス, No.282, pp.167-173, 2005.

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