

- 98 (with K. Kishimoto and A. Shimizu). Knot Theory and Game (a monograph in Japanese), Asakura Publishing Co., Ltd.
97. On mathematics education of knots (in Japanese), Osaka Journal of Mathematics Education, Memorial edition to Professor Hirokazu Okamori.
- 96 (with I. Tayama). Tabulation of 3-manifolds of lengths up to 10.
- 95 (with A. Shimizu). Quantization of the crossing number of a knot diagram.
94. The Alexander polynomials of immersed concordant links.
93. Characteristic genera of closed orientable 3-manifolds.
- 92 (with K. Yoshida). Topology of prion proteins, Journal of Mathematics and System Science 2(2012), 237-248.
- 91 (with A. Shimizu and K. Kishimoto). A game using knot theory, Japanese Patent Application 2011-95520 (2011).
- 90 (with T. Kadokami). Amphicheirality of links and Alexander invariants, SCIENCE CHINA Mathematics 54 (2011), 2213-2227.
89. On transforming a spatial graph into a plane graph, in: Statistical Physics and Topology of Polymers with Ramifications to Structure and Function of DNA and Proteins, Progress of Theoretical Physics Supplement, No. 191(2011), 235-244.
88. (with I. Tayama) Enumerating homology spheres with lengths up to 10 by a canonical order, Proceedings of Intelligence of Low-Dimensional Topology 2009 in honor of Professor Kunio Murasugi's 80th birthday, (2009), 83-92.
87. What is Knot Theory ? Why Is It In Mathematics ?, in: Teaching and Learning of Knot Theory in School Mathematics (A. Kawauchi and T. Yanagimoto ed.), OCAMI Studies Vol. 4(2011), 1-15, Osaka Municipal Univ. Press; (2012), 1-15, Springer Verlag.
86. Applying knot theory to sciences - mainly on knot models of a prion protein and a psychological mind (in Japanese), a civic lecture record, Sugaku Tushin, 14-4(February, 2010), 26-45.
85. On the Alexander polynomials of knots with Gordian distance one, Topology and its Applications 159(2012), 948-958.
84. Basics on topology (in Japanese), in: Topology Designing-Material / Materials Design Beginning With New Geometry, NTS, Inc. (2009), 127-140.
83. Topology of spatial graphs, in: Proceedings of Yamada Conference 2008 "Topological Molecules".
82. Defining the absolute value of the linking number of a link without concept of a negative

number (in Japanese), in: Introduction to Mathematical Education on Knots- for primary schoolchildren, junior high students, and the high school students, No. 3(A. Kawauchi and T. Yanagimoto ed.) (2009),13-21.

81.(I. Tayama) Enumerating prime link exteriors with lengths up to 10 by a canonical order,Proceedings of the joint conference of Intelligence of Low Dimensional Topology 2008 and the Extended KOOK Seminar, (2008), 135-143.

80. On a complexity of a spatial graph. in: Knots and soft-matter physics, Topology of polymers and related topics in physics, mathematics and biology, Bussei Kenkyu 92-1 (2009-4), 16-19.

79. Rational-slice knots via strongly negative-amphicheiral knots, Communications in Mathematical Research 25(2009),177-192.

78. The $(2,1)$ -cable of the figure eight knot is rationally slice (in a handwritten manuscript) (1980).

77 (with I. Tayama). Enumerating 3-manifolds with lengths up to 9 by a canonical order, Topology Appl. 157(2010), 261-268 .

76. Mind-knots and mind-relations: knot theory applied to psychology, Chapter 7 in: Qualitative Mathematics for the Social Sciences, Mathematical Models for Research on Cultural Dynamics (L. Rudolph ed.), Routledge's Cultural Dynamics of Social Representation series (Jaan Valsiner, series ed.) (2012), 227-253.

75. On alternation numbers of links, Topology Appl. 157(2010),274-279.

74. Lectures on knot theory (a monograph in Japanese), Kyoritsu Shuppan Co. Ltd(2007).

73 (with I. Tayama). Enumerating 3-manifolds by a canonical order, Intelligence of low dimensional topology 2006, Series on knots and everything,World Sci. publ. 40(2007), 165-172.

72. On the surface-link groups, Intelligence of low dimensional topology 2006, Series on knots and everything, World Sci. publ. 40(2007), 157-164.

71. A knot model in psychology, in: Knot Theory for Scientific Objects, OCAMI Studies 1(2007), 129-141.

70. The first Alexander $Z[Z]$ -modules of surface-links and of virtual links, Heiner Zieschang Gedenkschrift, Geometry & Topology Monographs 14(2008), 353-371.

69. Topological imitations and Reni-Meccia-Zimmermann's conjecture, Kyungpook Math. J., 46(2006), 1-9.

68 (with I. Tayama). Enumerating prime links by a canonical order, Journal of Knot Theory and Its Ramifications, 15(2006), 217-237.

67. Characterizing the first Alexander $Z[Z]$ -modules of surface-links and of virtual links, in: Proc. Second East Asian School of Knots, Links, and Related Topics in Geometric Topology (Darlian, Aug. 2005), 111-121.

66 (with I. Tayama). Enumerating the exteriors of prime links by a canonical order, in: Proc.

Second East Asian School of Knots, Links, and Related Topics in Geometric Topology (Darlian, Aug. 2005), 269-277.

65. Topological imitation of a colored link with the same Dehn surgery manifold, Proc. of International Conf. Topology in Matsue 2002, Topology Appl. 146-147(2005), 67-82.

64. From linear algebra to homology (a monograph in Japanese), Baifukan Tokyo (2000).

63 (with I. Tayama). Enumerating the prime knots and links by a canonical order, Proc. 1st East Asian School of Knots, Links, and Related Topics, 2004 (Seoul, Feb. 2004), (2004), 307-316.

62. A tabulation of 3-manifolds via Dehn surgery, Boletín de la Sociedad Matemática Mexicana (3) 10 (2004), 279-304.

61. Link corresponding to 3-manifold, in: Proc. of Professor Kazuaki Kobayashi and Professor Shin'ichi Suzuki's Joint 60th Birthday Symposium "The Present, Past and Future's Knot Theory" (2002), 130-154.

60. On pseudo-ribbon surface-links, J. Knot Theory Ramifications, 11(2002)1043-1062.

59. On linking signature invariants of surface-knots, J. Knot Theory Ramifications 11(2002), 369-385.

58. An intrinsic Arf invariant of a link and its surface-link analogue, in: Proc. of the first topology meeting of Japan-Mexico 1999, Topology Appl. 121(2002), 255-274.

57 (with S. Kamada and T. Matumoto). Combinatorial moves on ambient isotopic submanifolds in a manifold, J. Math. Soc. Japan, 53(2001), 321-331.

56. Algebraic characterization of an exact 4-manifold with infinite cyclic first homology, Journal Atti Sem. Mat. Fis. Univ. Modena 48 (2000), 405-424.

55. Torsion linking forms on surface-knots and exact 4-manifolds, in: Knots in Hellas '98, Series on Knots and Everything, World Sci. Publ. 24(2000), 208-228.

54. The quadratic form of a link, in: Proc. Low Dimension Topology, Contemp. Math. 233(1999), 97-116.

53. On the fundamental class of an infinite cyclic covering, Kobe J. Math. 15(1998),103-114.

52. Floer homology of topological imitations of homology 3-spheres, J. Knot Theory Ramifications 7(1998), 41-60.

51. Osaka City University Internet Lectures on knot theory (in Japanese, 1997).

50. The quadratic form of a link and a Seifert matrix, in: The 5th Korea-Japan School of Knots and Links, Proc. Applied Math. Workshop 8, KAIST, Korea (1997), 119-129.

49. Topological imitations, in: Lectures at Knots 96, World Scientific Publ. (1997) 19-37.

48. A survey of knot theory, Birkhauser Verlag (1996).

47. Distance between links by zero-linking twists, Kobe J. Math. 13(1996), 183-190.

46. Mutative hyperbolic homology 3-spheres with the same Floer homology, Geometriae Dedicata 61(1996), 205-217.

45. (with J. A. Hillman) Unknotting orientable surfaces in the 4-sphere, *J. Knot Theory Ramifications* 4(1995),213-224.
44. Topological imitation, mutation and the quantum $SU(2)$ invariants, *J. Knot Theory Ramifications* 3(1994), 25-39.
43. A survey of topological imitations of (3,1)-dimensional manifold pairs, *Proc. Applied Math. Workshop* 4(1994), 43-52.
42. On coefficient polynomials of the skein polynomial of an oriented link, *Kobe J. Math.* 11(1994), 49-68.
41. Splitting a 4-manifold with infinite cyclic fundamental group, *Osaka J. Math.* 31(1994), 489-495.
40. Introduction to almost identical imitations of (3,1)-dimensional manifold pairs, in: *Topics in Knot Theory, Proceedings of NATO-ASI Topics in Knot Theory(Eruzurum /Turkey)*, Kluwer Academic Publishers, (1993), 69-83.
39. Almost identical imitations of (3,1)-dimensional manifold pairs and the manifold mutation, *J. Austral. Math. Soc., Ser. A* 55(1993), 100-115.
38. Almost identical imitations of (3,1)-dimensional manifold pairs and the branched coverings, *Osaka J. Math.* 29(1992), 299-327.
37. Almost identical link imitations and the skein polynomial, in: *Knots 90*, Walter de Gruyter, Berlin-New York (1992), 465-476.
36. The first Alexander modules of surfaces in 4-sphere, in: *Algebra and Topology*, *Proc. KAIST Math. Workshop* 5(1990), 81-89.
35. Almost identical imitations of (3,1)-dimensional manifold pairs, *Osaka J. Math.* 26(1989), 743-758.
34. An imitation theory of manifolds, *Osaka J. Math.* 26(1989), 447-464.
33. Imitations of (3,1)-dimensional manifold pairs, *Sugaku* 40(1988),193-204 (in Japanese); *Sugaku Expositions* 2(1989), 141-156 (published from Amer. Math. Soc. in English).
32. The imbedding problem of 3-manifolds into 4-manifolds, *Osaka J. Math.* 25(1988), 171-183.
31. Knots in the stable 4-space; An overview, *A Fete of Topology*, Academic Press (1988), 453-470.
30. On the integral homology of infinite cyclic coverings of links, *Kobe J. Math.* 4(1987), 31-41.
29. Three dualities on the integral homology of infinite cyclic coverings of manifolds, *Osaka J. Math.* 23(1986), 633-651.
28. On the signature invariants of infinite cyclic coverings of even dimensional manifolds, *Homotopy Theory and Related Topics, Advanced Studies in Pure Math.* 9(1986), 177-188.

27. On the signature invariants of infinite cyclic coverings of closed odd dimensional manifolds, Algebraic and Topological Theories-to the memory of Dr. T. Miyata, Kinokuniya Co. Ltd. (1985),52-85.
26. Classification of pretzel knots, Kobe J. Math. 2(1985), 11-22.
- 25 (with F. Hosokawa, Y. Nakanishi, and M. Sakuma). Note on critical points of surfaces in 4-space, Kobe J. Math. 1(1984),151-152.
- 24(with T. Kobayashi and M. Sakuma). On 3-manifolds with no periodic maps, Japan. J. Math. 10(1984), 185-193.
23. Rochlin invariant and α -invariant, Four-Manifold Theory, Contemp.Math. 35(1984), 315-326.
22. On the Robertello invariants of proper links, Osaka J. Math. 21(1984), 81-90.
- 21 (with T. Shibuya and S. Suzuki). Descriptions on surfaces in four-space, II: Singularities and cross-sectional links, Math. Sem. Notes, Kobe Univ. 11(1983), 31-69.
- 20 (with H.Murakami and K.Sugishita) On the T-genus of knot cobordism, Proc. Japan Acad. 59(1983), 91-93.
19. A test for the fundamental group of a 3-manifold, J. Pure Appli. Algebra, 28(1983), 189-196.
18. On the Rochlin invariants of \mathbb{Z}_2 -homology 3-spheres with cyclic actions, Japan. J. Math. 8(1982), 217-258.
- 17 (with T.Shibuya and S.Suzuki). Descriptions on surfaces in four-space, I : Normal forms, Math. Sem. Notes, Kobe Univ. 10 (1982),75-125.
16. On 3-manifolds admitting orientation-reversing involutions, J. Math. Soc. Japan 33(1981), 571-589.
- 15 (with S. Kojima). Algebraic classification of linking pairings on 3-manifolds, Math. Ann. 253(1980), 29-42.
- 14 (with T. Matumoto) An estimate of the homology torsion modules of infinite cyclic coverings and knot theory, Pacific J. Math. 90(1980), 99-103.
- 13 . On links not cobordant to split links, Topology 19(1980), 321-334.
12. On a 4-manifold homology equivalent to a bouquet of surfaces, Trans. Amer. Math. Soc. 262(1980), 95-112.
11. Vanishing of the Rochlin invariants of some \mathbb{Z}_2 -homology 3-spheres, Proc. Amer. Math. Soc. 79(1980), 303-307.
10. The invertibility problem on amphicheiral excellent knots, Proc. Japan Acad. 55(1979), 399-402.
- 9 (with R. Hartley). Polynomials of amphicheiral knots, Math. Ann., 243(1979), 63-70.
8. On n-manifolds whose punctured manifolds are imbeddable in (n+1)-sphere and spherical

manifolds, Hiroshima Math. J. 9(1979), 47-57.

7 (with F. Hosokawa). Proposals for unknotted surfaces in four-space. Osaka J. Math. 16(1979), 233-248.

6. On the Alexander polynomials of cobordant links, Osaka J. Math. 15(1978), 151-159.

5. On quadratic forms of 3-manifolds, Invent. Math. 43(1977), 177-198.

4. H^- -cobordism, I, Osaka J. Math. 13(1976), 567-590.

3. Three dimensional homology handles and circles, Osaka J. Math. 12(1975), 565-581.

2. A partial Poincare duality theorem for infinite cyclic coverings, Quart. J. Math. 26(1975), 437-458.

1. A classification of compact 3-manifolds with infinite cyclic fundamental groups, Proc. Japan Acad. 50(1974), 175-178.