

## 梅原雅顕・業績リスト（2024.9月現在）

投稿中の論文：

- K. Saji, M. Umehara and K. Yamada, *Deformations of swallowtails in a 3-dimensional space form, preprint.*
- *Convexity of space-like projections of submanifolds with co-dimension 2 in Lorentz-Minkowski space, preprint.* (arXiv:2406.05971).
- T. Fukui, R. Kinoshita, D. Pei, M. Umehara and H. Yu, *Cuspidal edges and generalized cuspidal edges in the Lorentz-Minkowski 3-space, Preprint* (arXiv:2409.01603).

掲載論文および掲載予定論文：

- (1) S. Akamine, A. Honda, M. Umehara and K. Yamada, *Null hypersurfaces as wave fronts in Lorentz-Minkowski space*, to appear in J. Math. Soc. Japan (arXiv:2203.02864)
- (2) N. Ando and M. Umehara, *Umbilics of surfaces in the Lorentz-Minkowski 3-space*, Results Math. (2023) 78:241.
- (3) K. Saji, M. Umehara and K. Yamada, *Deformations of cuspidal edges in a 3-dimensional space form*, Kodai Math. J. **44** (2024), 69–76
- (4) S. Fujimori, Y. Kawakami, M. Kokubu, W. Rossman, M. Umehara, K. Yamada, S.-D. Yang *Analytic extensions of constant mean curvature one geometric catenoids in de Sitter 3-space*, Differential Geometry and its Applications **84**, October 2022, 101924, <https://doi.org/10.1016/j.difgeo.2022.101924>
- (5) A. Honda, K. Naokawa, K. Saji, M. Umehara and K. Yamada, *A generalization of za-kalyukin's lemma, and symmetries of surface singularities*, Journal of Singularities **25** (2022), 299–324 Proc. of 16th International Workshop on Singularities, Sao Carlos, 2020 DOI:10.5427/jsing.2022.25m
- (6) A. Honda, K. Naokawa, K. Saji, M. Umehara and K. Yamada, *Symmetries of cross caps*, Tohoku Math. J. **75** (2023, March) 131–141. DOI: 10.2748/tmj.20211203
- (7) A. Honda, K. Naokawa, K. Saji, M. Umehara and K. Yamada, *On the existence of four or more curved foldings with common creases and crease patterns*, Beitr Algebra Geom (2021) <https://doi.org/10.1007/s13366-021-00602-2>
- (8) M. Umehara and K. Yamada, *Hypersurfaces with light-like points in a Lorentzian manifold II*, Kodai Math. J. **44** (March) (2021), 69-76
- (9) A. Honda, K. Naokawa, K. Saji, M. Umehara and K. Yamada, *Duality on generalized cuspidal edges preserving singular set images and first fundamental forms*, J. Singul. **22** (2020), 59–91.
- (10) A. Honda, K. Naokawa, K. Saji, M. Umehara, and K. Yamada, *Cuspidal edges with the same first fundamental forms along a knot*, J. Knot Theory Ramifications **29** (2020), <https://doi.org/10.1142/S0218216520500479>.
- (11) A. Honda, K. Naokawa, K. Saji, M. Umehara, and K. Yamada, *Curved foldings with common creases and crease patterns*, Adv. Appl. Math. **121** (2020), <https://doi.org/10.1016/j.aam.2020.102083>.
- (12) S. Akamine, A. Honda, M. Umehara and K. Yamada, *Null hypersurfaces in Lorentzian manifolds with the null energy condition*, J. Geom. Phys. **155** (2020), <https://doi.org/10.1016/j.geomphys.2020.103751>.
- (13) A. Honda, K. Naokawa, M. Umehara and K. Yamada Isometric deformations of wave fronts at non-degenerate singular points Hiroshima Mathematical Journal, Vol.50 No. 2 (2020) 269–312.
- (14) S. Akamine, A. Honda, M. Umehara and K. Yamada, *Bernstein-type theorem for zero mean curvature hypersurfaces without time-like points in Lorentz-Minkowski space*, Bull. Braz. Math. Soc. (N.S.) **52**(1), 175-181 (2021).
- (15) K. Enomoto, Y. Kitagawa and M. Umehara, *Extrinsic diameter of immersed flat tori in the 3-sphere II* Journal of Geometry volume 111, Article number: 5 (2020) <https://doi.org/10.1007/s00022-019-0520-0> January 2020

- (16) S. Akamine, M. Umehara and K. Yamada. Improvement of the Bernstein-type theorem for space-like zero mean curvature graphs in Lorentz-Minkowski space using fluid mechanical duality Proc. Amer. Math. Soc. Ser. B Vol. 7, (2020) Pages 17-27, (February 20), DOI: <https://doi.org/10.1090/bproc/44>
- S. Fujimori, Y. Kawakami, M.Kokubu, W. Rossman, M.Umehara and K.Yamada, Exceptional constant mean curvature one catenoids in de Sitter 3-space, Math. J. Okayama Univ. **62** (2020, January) Page179-195.
- (17) S. Akamine, M. Umehara, K. Yamada, *Space-like maximal surfaces containing entire null lines in Lorentz-Minkowski 3-space*, Proc. Japan Acad. Ser.A, Math. Sci., Vol. 95, No.9, (2019) 97-102, doi: 10.3792/pjaa.95.97
- (18) M. Umehara and K. Yamada, Hypersurfaces with light-like points in a Lorentzian manifold Journal of Geometric Analysis 29, (2019, December) Page 3405-3437, (<https://doi.org/10.1007/s1220-018-00118-7>).
- (19) A. Honda, K. Naokawa, M. Umehara, K. Yamada, *Isometric realization of cross caps as formal power series and its applications*, Hokkaido Mathematical Journal, **48**, Number 1 (2019), 1-44. (DOI: 10.14492/hokmj/1550480642) February 2019.
- (20) Masaaki Umehara and Kotaro Yamada, *Surfaces with light-like points in Lorentz-Minkowski 3-space with applications*, in “Lorentzian Geometry and Related Topics”, Springer Proceedings of Mathematics and Statics 211,(2018),April, pp253-273.
- (21) 梅原雅顕, 特異点の微分幾何学－3次元時空の極大曲面をテーマにして一, 応用数理学会誌のフォーラムへの寄稿論文, 「応用数理」 28巻2号 2018年6月 pp86-89.
- (22) M. Umehara and K. Yamada, *Surfaces with light-like points in Lorentz-Minkowski 3-space with applications* ,(GeLoMa 2016, Malaga, Spain, September 20-23) Lorentzian Geometry and Related Topics, (eds. M.A. Canadas-Pineto et al.), Springer (2017) 253-273.
- (23) S. Fujimori, U. Hertrich-Jeromin, M. Kokubu and M. Umehara and K. Yamada *Quadrics and Scherk towers*, Monatsh Math. 186 (2017), 249-279 DOI 10.1007/s00605-017-1075-5.
- (24) S. Fujimori, Y. Kawakami, M. Kokubu, W. Rossman, M. Umehara, K. Yamada, *Analytic extension of Jorge-Meeks type maximal surfaces in Lorentz-Minkowski 3-space*, Osaka J. Math. 54 (2017), 249-272
- (25) A. Honda, M. Koiso, M. Kokubu, M. Umehara and Kotaro Yamada, *Mixed type surfaces with bounded mean curvature in 3-dimensional space-times*, Diff. Geom. and its Appl. **52** (2017), 64-77.
- (26) N. Ando, T. Fujiyama and M. Umehara,  *$C^1$ -umbilics with arbitrarily high indices*, Pasific Journal of Mathematics. **288** No. 1, (2017), dx.doi.org/10.2140/pjm.2017.288.1.
- (27) S. Fujimori, Y. Kawakami, M. Kokubu, W. Rossman, M. Umehara, K. Yamada, *Zero mean curvature entire graphs of mixed type in Lorentz-Minkowski 3-space*, Q. J. Math **67**(2016) 801-837, DOI: <https://doi.org/10.1093/qmath/haw038>
- (28) K. Saji, M. Umehara and K. Yamada, *An index formula for a bundle homomorphism of the tangent bundle into a vector bundle of the same rank, and its applications*, J. Math. Soc. Japan. 69 (2017) 417-457 doi: 10.2969/jmsj/06910417
- (29) L.F. Martins, K. Saji, M. Umehara and K. Yamada, Behavior ofm Gaussian curvature and mean curvature near non-degenerate singular points on wave fronts, Geometry and Topology of manifolds, 247-281, Springer Proc. Math. Stat. **154**, Springer Tokyo, 2016. (The proceedings of China-Japan Geometry Conference "Geometry and Topology of Manifold —The 10th Geometry Conference for the Friendship of China and Japan 2014".)
- (30) K. Naokawa, M. Umehara, and K. Yamada, *Isometric deformations of cuspidal edges*, Tohoku Math. J. **68**, No. 1, (2016) 73–90.
- (31) M. Hasegawa, A. Honda, K. Naokawa, K. Saji, M. Umehara, and K. Yamada, *Intrinsic properties of singularities of surfaces*, International Journal of Math. 26, 1540008 (2015) [34 pages] DOI: 10.1142/S0129167X1540008X.

- (32) S. Fujimori, Y. W. Kim, S.-E. Koh, W. Rossman, H. Shin, M. Umehara, K. Yamada and S.-D. Yang *Zero mean curvature surfaces in Lorentz-Minkowski 3-space and 2-dimensional fluid mechanics*, Math. J. Okayama Univ. 57 (2015), 173–200.
- (33) S. Fujimori, Y. W. Kim, S.-E. Koh, W. Rossman, H. Shin, M. Umehara, K. Yamada and S.-D. Yang, Zero mean curvature surfaces in Lorentz-Minkowski 3-space which change type across a light-like line, Osaka J. Math. 52 (2015), 285–297, January.
- (34) U. Hertrich-Jeromin, Y. Suyama, M. Umehara and K. Yamada A duality for conformally flat hypersurfaces, Beiträge zur Algebra und Geometrie / Contributions to Algebra and Geometry October 2015, Volume 56, Issue 2, pp 655-676 (First online: 12 October 2014) (DOI) 10.1007/s13366-014-0225-3.
- (35) H. Gounai and M. Umehara, *Caustics of convex curves*, Hiro Gounai and Masaaki Umehara, Journal of Knot Theory and Its Ramifications, Volume 23, Issue 10, September 2014 DOI: 10.1142/S0218216514500503
- (36) M. Hasegawa, A. Honda, K. Naowaka, M. Umehara and K. Yamada, *Intrinsic invariants of Cross Caps*, Selecta Math. New Ser. (2014) 20:769–785 DOI 10.1007/s00029-013-0134-6 July.
- (37) S. Fujimori, W. Rossman, M. Umehara, K. Yamada and S.-D. Yang, *Embedded triply periodic zero mean curvature surfaces of mixed type in Lorentz-Minkowski 3-space*, Michigan Math. J. 63 (2014), 189–207. March doi:10.1307/mmj/1395234364
- (38) F. Martin, M. Umehara and K. Yamada, *Flat surfaces in hyperbolic 3-space whose hyperbolic Gauss maps are bounded*, Rev. Mat. Iberoam. 30 (2014), no. 1, 309–316. doi 10.4171/rmi/779, March.
- (39) L. Ferrer, F. Martin, M. Umehara and K. Yamada, *A construction of a complete bounded null curves in  $C^3$* , Kodai Mathematical Journal 37, (2014) 59–96, March doi:10.2996/kmj/1396008249
- (40) S. Fujimori, Y. Kawakami, M. Kokubu, W. Rossman, M. Umehara and K. Yamada, *Hyperbolic Metrics on Riemann surfaces and Space-like CMC-1 surfaces in de Sitter 3-space*, M. Sánchez et al (eds), Recent Trends in Lorentzian Geometry, Springer Proceedings in Mathematics & Statistics 26,2013, Page 1–48. DOI:10.1007/978-1-4614-4897-6-1
- (41) S. Ohno, T. Ozawa and M. Umehara, *Closed planar curves without inflections*, Proc. Amer. Math. Soc. 141 (2013) 651–665. <http://dx.doi.org/10.1090/S0002-9939-1991-1043406-7>
- (42) S. Fujimori, Y. W. Kim, S.-E. Koh, W. Rossman, H. Shin, H. Takahashi, M. Umehara, K. Yamada and S.-D. Yang, *Zero mean curvature surfaces in  $L^3$  containing a light-like line* C.R. Acad. Sci. Paris. Ser. I. 350 (2012) 975–978. November <http://dx.doi.org/10.1016/j.crma.2012.10.024>
- (43) G. Thorbergsson and M. Umehara, *A refinement of Foreman's four vertex theorem and its dual version*, Kyoto J. Math. 52 (2012) 743–758. doi:10.1215/21562261-1728848
- (44) S. Shiba and M. Umehara, *The behavior of curvature functions at cusps and inflection points*, Differential Geometry and its Applications 30 (2012), 285–299. doi:10.1016/j.difgeo.2012.04.001
- (45) K. Saji, M. Umehara and K. Yamada, *Coherent tangent bundles and Gauss-Bonnet formulas for wave fronts*, Journal of Geometric Analysis (2012) 22:383–409. DOI 10.1007/s12220-010-9193-5.
- (46) S. Fujimori, Y. Kawakami, M. Kokubu, W. Rossman, M. Umehara and K. Yamada, *CMC-1 trinoids in  $H^3$  and metrics of constant curvature one with conical singularities on  $S^2$* , Proc. Japan Acad. Ser. A Math. Sci. 87 (2011), 144–149.
- (47) K. Saji, M. Umehara and K. Yamada,  *$A_2$ -singularities of hypersurfaces with non-negative sectional curvature in Euclidean space*, Kodai Math. J. 34 (2011), 390–409.
- (48) Y. Kitagawa and M. Umehara, *Extrinsic diameter of immersed flat tori in  $S^3$* , Geometriae Dedicata 155 (2011), 105–140. Y. Kitagawa and M. Umehara, *Erratum to: Extrinsic diameter of immersed flat tori in  $S^3$* , Geom Dedicata (2014) 171:407–412.

- (49) M. Umehara, *A simplification of the proof of Bol's conjecture on sextactic points*, Proc. Japan. Acad. 87, Number 1 (2011), 10-12.
- (50) M. Kokubu and M. Umehara *Orientability of linear Weingarten surfaces, spacelike CMC-1 surfaces and maximal surfaces* Math. Nachr. 284 (2011), 1903 – 1918.  
(DOI 10.1002/mana.200910176).
- (51) M. Umehara and K. Yamada, *Applications of a completeness lemma in minimal surface theory to various classes of surfaces*, Bulletin of the London Mathematical Society, 43 (2011), 191–199. M. Umehara and K. Yamada, *Corrigendum: Applications of a completeness lemma in minimal surface theory to various classes of surfaces* (Bull. London Math. Soc. 43 (2011) 191–199), Bulletin of the London Mathematical Society (doi:10.1112/blms/bds017).
- (52) Huili Liu, M. Umehara and K. Yamada, *The duality of conformally flat manifolds*, Bulletin of the Brasilian Mathematical Society (N.S.), 42 (2011), 131–152.
- (53) K. Saji, M. Umehara and K. Yamada, *The duality between singular points and inflection points on wave fronts*, Osaka J. Math. 47 (2010), 591-607.
- (54) K. Saji, M. Umehara and K. Yamada, *Singularities of Blaschke normal maps of convex surfaces*, C.R. Acad. Sci. Paris. Ser. I 348 (2010), 665-668.
- (55) M. Umehara, *Surfaces with singularities and Osserman-type inequalities*, Proceedings of the 16th OCU International Academic Symposium 2008, OCAMI Studies Vol.3 (2009), 15–28.
- (56) S. Fujimori, W. Rossman, M. Umehara, K. Yamada and S.D.Yang, *New maximal surfaces in Minkowski 3-space with arbitrary genus and their cousins in de Sitter 3-space*, Results in Math. 56 (2009), 41–82.
- (57) S. Fujimori, W. Rossman, M. Umehara, K. Yamada and S.D.Yang, *Spacelike mean curvature one surfaces in de Sitter 3-space*, Communications in Analysis and Geometry 17 (2009), 383-427.
- (58) S. Murata and M. Umehara, *Flat surfaces with singularities in Euclidean 3-space*, Journal of Differential Geometry 82 (2009), 279–316.
- (59) F. Martin, M. Umehara and K. Yamada, *Complete bounded holomorphic curves immersed in  $\mathbf{C}^2$  with arbitrary genus*, Proc. Amer. Math. Soc. 137 (2009), 3437–3450.
- (60) F. Martin, M. Umehara and K. Yamada, *Complete bounded null curves immersed in  $\mathbf{C}^3$  and  $PSL(2, \mathbf{C})$* , Calculus of Variations and Partial Differential Equations 36 (2009), 119–139. F. Martin, M. Umehara and K. Yamada, *Erratum to: Complete bounded null curves immersed in  $\mathbf{C}^3$  and  $SL(2, \mathbf{C})$* , Calculus of Variations and Partial Differential Equations 46, (2013) 439–440.
- (61) K. Saji, M. Umehara and K. Yamada,  *$A_k$  singularities of wave fronts*, Mathematical Proceedings of the Cambridge Philosophical Society, 146 (2009), 731-746.
- (62) K. Saji, M. Umehara and K. Yamada, *The geometry of fronts*, Ann.of Math.169 (2009), 491–529.
- (63) S. Fujimori, K. Saji, M. Umehara and K. Yamada, *Singularities of maximal surfaces*, Math. Z. 259 (2008), 827–848.
- (64) G. Thorbergsson and M. Umehara, *Inflection points and double tangents on anti-convex curves in the real projective plane*, Tohoku Mathematical Journal 60 (2008), 149–181.
- (65) Y. Kurono and M. Umehara, *Flat Möbius strips of given isotopy type in  $\mathbf{R}^3$  whose centerlines are geodesic or lines of curvature*, Geom. Dedicata 134 (2008), 109–130.
- (66) K. Saji, M. Umehara and K. Yamada, *Behavior of corank one singular points on wave fronts*, Kyusyu Journal of Mathematics 62 (2008), 259–280.
- (67) W. Rossman, M. Umehara and K. Yamada, *Period problems for mean curvature one surfaces in  $\mathbf{H}^3$* , Surveys on Geometry and Integrable systems, Advanced studies in Pure Mathematics 51 (2008), 347–399.
- (68) M. Kokubu, W. Rossman, and K. Yamada, *Flat fronts in hyperbolic 3-space and their caustics*, J. Math. Soc. Japan 59 (2007), 265–299.

- (69) M. Umehara and K. Yamada, *Maximal surfaces with singularities in Mikowski space*, Hokkaido Math. J. 35 (2006), 13-40.
- (70) M. Kokubu, W. Rossman, K. Saji, M. Umehara and K. Yamada, *Singularities of flat fronts in hyperbolic 3-space*, Pacific J. Math. 221 (2005), 303–351. Addendum:Singularities of flat frontts in hyperbolic 3-space, Pacific J. Math. 294 (2018), 505–509.
- (71) W. Rossman, M. Umehara and K. Yamada, *Constructing mean curvature 1 surfaces in  $H^3$  with irregular ends*, Global Theory of Minimal Surfaces (ed. D. Hoffman) Clay Mathematics Proceedings 2, Amer. Math. Soc. (2005), 561–584.
- (72) G. Thorbergsson and M. Umehara, *A global theory of flexes of periodic functions*, Nagoya Math. J. 173 (2004), 85–138.
- (73) M. Kokubu, M. Umehara and K. Yamada, *Flat fronts in hyperbolic 3-space*, Pacific J. Math. 216 (2004), 149–175.
- (74) W. Rossman, M. Umehara and K. Yamada, *Mean curvature 1 surfaces in hyperbolic 3-space with low total curvature I*, Hiroshima Math. J. 34 (2004), 21–56.
- (75) C. McCune and M. Umehara, *An analogue of the UP-iteration for constant mean curvature one surfaces in Hyperbolic 3-space*, Diff. Geom. and its Appl. 20 (2004), 197–207.
- (76) M. Kokubu, M. Umehara and K. Yamada, *An elementary proof of Small’s formula for null curves in  $PSL(2, C)$  and an analogue for Legendrian curves in  $PSL(2, C)$* , Osaka J. Math. 40 (2003), 697–715.
- (77) W. Rossman, M. Umehara and K. Yamada, *Mean curvature 1 surfaces in hyperbolic 3-space with low total curvature II*, Tohoku Math. J. 55 (2003), 375–395.
- (78) G. Thorbergsson and M. Umehara, *Sectactic points on a simple closed curve*, Nagoya Math. J. 167 (2002), 55–94.
- (79) M. Kokubu, M. Takahashi, M. Umehara and K. Yamada, *An analogue of minimal surface theory in  $SL(n, C)/SU(n)$* , Trans. Amer. Math. Soc. 354 (2002), 1299–1325.
- (80) M. Kokubu, M. Umehara, and K. Yamada, *Minimal surfaces that attain equality in the Chern-Osserman inequality*, Contemporary Mathematics 308 Differential Geometry and Integrable systems, (M. Guest, R. Miyaoka, Y. Ohnita ed.) American Mathematical Society (2002), 223–228.
- (81) A. I. Bobenko and M. Umehara, *Monodromy of isometric deformation of CMC surfaces*, Hiroshima Math. J. 31 (2001), 291–297.
- (82) S. Kato, M. Umehara and K. Yamada, *General existence of minimal surfaces of genus zero with catenoidal ends and prescribed flux*, Communications in Analysis and Geometry 8 (2000), 83–114.
- (83) M. Umehara and K. Yamada, *Metrics of constant curvature 1 with three conical singularities on the 2-sphere*, Illinois Journal of Math. 44 (2000), 72–93.
- (84) R. Aiyama, K. Akutagawa, R.Miyaoka and M. Umehara, *A global correspondence between CMC-surfaces in  $S^3$  and pairs of non-conformal harmonic maps into  $S^2$* , Proc. Amer. Math. Soc. 128(2000), 939–941.
- (85) W. Rossman, M. Umehara and K. Yamada, *Flux for mean curvature 1 surfaces in hyperbolic 3-space, and applications*, Proc. Amer. Math. Soc. 127 (1999), 2147–2154.
- (86) G. Thorbergsson and M. Umehara, *A unified approach to the four vertex theorem II*, Differential and symplectic topology of knots and curves, (ed. S.Tabachnikov) American Mathematical Society Translations Series 2, 190 (1999), 229–252.
- (87) M. Umehara, *A unified approach to the four vertex theorem I*, Differential and symplectic topology of knots and curves, (ed. S.Tabachnikov) American Mathematical Society Translations Series 2, 190 (1999), 185–228.
- (88) 梅原雅顕, 4 頂点定理について, 数学 50 (1998) 420–427.
- (89) M. Umehara, *A computation of the basic invariant  $J^+$  for closed 2-vertex curves*, Journal of Knot Theory and Its Ramifications 6 (1997), 105-113.
- (90) M. Umehara and K. Yamada, *Geometry of surfaces of constant mean curvature 1 in the hyperbolic 3-space*, Sugaku Expositions 10 (1997), 41–55.

- (91) M. Umehara and K. Yamada, *A duality on CMC-1 surfaces in hyperbolic space, and a hyperbolic analogue of the Osserman inequality*, Tsukuba J. Math. 21 (1997), 229–237.
- (92) W. Rossman, M. Umehara, and K. Yamada, *Irreducible constant mean curvature 1 surfaces in hyperbolic space with positive genus*, Tohoku Math. J. 49 (1997), 449 – 484.
- (93) S. Kato, M. Umehara, and K. Yamada, *General existence of minimal surfaces with prescribed flux II*, Topics in complex analysis, differential geometry and mathematical physics (eds. S. Dimiev and K. Sekigawa), World Scientific (1997), 116–135.
- (94) S. Kato, M. Umehara, and K. Yamada, *An inverse Ploblem of the flux formula for minimal surfaces*, Indiana Univ. Math. J. 46 (1997), 529–559.
- (95) O. Kobayashi and M. Umehara, *Geometry of Scrolls*, Osaka J. Math. 33 (1996), 441–473.
- (96) M. Umehara and K. Yamada, *Another construction of a CMC-1 surface in  $H^3$* , Kyungpook Math. J. 35 (1996), 831–849.
- (97) M. Umehara and K. Yamada, *Surfaces of constant mean curvature  $c$  in  $H^3(-c^2)$  with prescribed hyperbolic Gauss map*, Math. Ann. 304 (1996), 203–204.
- (98) 梅原雅顕, 山田光太郎, 3次元双曲型空間の平均曲率1の曲面について数学 47 (1995), 145–157.
- (99) M. Umehara, *6-vertex theorem for closed planar curve which bounds an immersed surface with non-zero genus*, Nagoya Math. J. 134 (1994), 75–89.
- (100) M. Umehara and K. Yamada, *Complete surfaces of constant mean curvature one in the hyperbolic 3-space*, Ann. of Math. 137 (1993), 611–638.
- (101) M. Umehara and K. Yamada, *Deformation of Lie groups and its application to surface theory, Geometry and its application*, edited by Tadashi Nagano et. al, WorldScientific, Singapole (1993), 241–255.
- (102) M. Umehara and K. Yamada, *A parametrization of the Weierstrass formulae and perturbation of some complete minimal surfaces of  $R^3$  into the hyperbolic 3-space*, J. Reine Angew. Math. 432 (1992), 93–116.
- (103) H. Tasaki and M. Umehara, *An invariant on 3-dimensional Lie algebras*, Proc. Amer. Math. Soc. 115 (1992), 293–294.
- (104) M. Umehara and K. Yamada, *A deformation of tori with constant mean curvature in  $R^3$  to those in other space forms*, Trans. Amer. Math. Soc. 330 (1992), 845–857.
- (105) H. Tasaki, M. Umehara, and K. Yamada, *Deformations of symmetric spaces of compact type to their noncompact duals*, Japan J. Math. 17 (1991), 383–399.
- (106) M. Umehara: *A characterization of compact surfaces with constant mean curvature*, Proc. Amer. Math. Soc. 108 (1990), 483–489.
- (107) M. Umehara and K. Yamada, *Harmonic non-holomorphic maps of 2-tori into the 2-sphere*, Geometry of Manifolds (ed. K. Shiohama), Academic Press(1989), 151–160.
- (108) M. Umehara, *Diastases and real analytic functions on complex manifolds*, J. Math. Soc. Japan 40 (1988), 519–539.
- (109) M. Umehara, *Einstein Kaehler submanifolds of a complex linear or hyperbolic space*, Tohoku Math. J. 39 (1987), 385–389.
- (110) M. Umehara, *Kaehler submanifolds of complex space forms*, Tokyo J. Math. 10 (1987), 203–214.
- (111) U-hang Ki, H. Nakagawa and M. Umehara, *On complete hypersurfaces with harmonic curvature in a Riemannian manifold of constant curvature*, Tsukuba J. Math. 11 (1987), 61–76.
- (112) M. Umehara: *Hypersurfaces with harmonic curvature*, Tsukuba J. Math. 10 (1986), 79–88.

### 著書および雑誌等への論説等

- [1] 梅原 雅顕・一木俊助共著, これから集合と位相, 裳華房 (2022, 11月).
- [2] 梅原 雅顕・山田光太郎・佐治 健太郎共著, 特異点をもつ曲線と曲面の微分幾何学 (現代数学シリーズ) 2017/12/4 発行単行本: 319 ページ出版社: 丸善出版 (2017/12/4) ISBN-10: 4621302159 ISBN-13: 978-4621302156
- [3] 梅原雅顕・山田光太郎, Wayne Rossman (訳) Differential Geometry of Curves and Surfaces, World Scientific 2017.
- [4] 梅原雅顕・山田光太郎, 「曲線と曲面—微分幾何的アプローチー」(改訂版), 裳華房 (2015, 2月).
- [5] 梅原雅顕, 伊藤光弘著「曲面の幾何学」(遊星社 2013年4月出版) の書評, 数理科学 2014年2月号 No.608 (サイエンス社)
- [6] 梅原雅顕, 「特異点をもつ曲線と曲面の幾何学」, 慶應大学数理科学セミナー・ノート 38 (2009).
- [7] 梅原雅顕, 「3次元双曲型空間の平均曲率1の曲面 (-極小曲面との関係をテーマにして-)」川上裕記, 名古屋大学多元数理講究録 volume 9 (2009).
- [8] 梅原雅顕, 「特異点をもつ曲面の微分幾何学」, 数学のたのしみ「特異点の世界: その広さと豊かさ」(上野健爾, 砂田利一, 新井仁之編集), 日本評論社 (2005), 50–64.
- [9] 梅原雅顕, 「特異点をもつ曲線と曲面の幾何」, 21世紀の数学-幾何学の未踏峰- (宮岡礼子, 小谷元子編集), 日本評論社 (2004), 2–17.
- [10] 梅原雅顕・山田光太郎, 「曲線と曲面—微分幾何的アプローチー」, 裳華房 (2002).
- [11] 梅原雅顕・山田光太郎, 「双曲平面とホロスフィア」, 別冊数理科学 2002年4月号「現代物理と現代幾何」-物理学における幾何学の有用性-, サイエンス社 (2002), 166–174.
- [12] 梅原雅顕, 「うずまきの幾何」, 川久保, 宮西編, 現代数学序説 (1), 大阪大学出版会, (1996), 89–104.