

Referenze

1. M. Abate and F. Tovena, *Curve e superfici*, Springer-Verlag, 2006.
2. ———, *Geometria differenziale*, Springer-Verlag, 2011.
3. G. Alberti, *Rank one property for derivatives of functions with bounded variation*, Proc. Roy. Soc. Edinburgh Sect. A **123** (1993), no. 2, 239–274.
4. ———, *On the structure of singular sets of convex functions*, Calc. Var. Partial Differential Equations **2** (1994), 17–27.
5. G. Alberti, L. Ambrosio, and P. Cannarsa, *On the singularities of convex functions*, Manuscripta Math. **76** (1992), 421–435.
6. A. D. Aleksandrov, *Uniqueness theorems for surfaces in the large. V*, Amer. Math. Soc. Transl. (2) **21** (1962), 412–416.
7. S. Alexander, V. Kapovitch, and A. Petrunin, *Alexandrov geometry: foundations*, ArXiv Preprint Server – <http://arxiv.org>, 2022.
8. L. Ambrosio, *A compactness theorem for a new class of functions of bounded variation*, Boll. Un. Mat. Ital. **3-B** (1989), 857–881.
9. ———, *Variational problems in SBV*, Acta Appl. Math. **17** (1989), 1–40.
10. ———, *Existence theory for a new class of variational problems*, Arch. Rat. Mech. Anal. **111** (1990), 291–322.
11. ———, *Calculus, heat flow and curvature–dimension bounds in metric measure spaces*, Proceedings of the International Congress of Mathematicians – Rio de Janeiro 2018. Vol. I. Plenary lectures, World Sci. Publ., Hackensack, NJ, 2018, pp. 301–340.
12. L. Ambrosio, P. Cannarsa, and H. M. Soner, *On the propagation of singularities of semi-convex functions*, Ann. Sc. Norm. Sup. Pisa **20** (4) (1993), 597–616.
13. L. Ambrosio, N. Fusco, and D. Pallara, *Functions of bounded variation and free discontinuity problems*, Oxford University Press, 2000.
14. L. Ambrosio and C. Mantegazza, *Curvature and distance function from a manifold*, J. Geom. Anal. **8** (1998), no. 5, 723–748, Dedicated to the memory of Fred Almgren.
15. L. Ambrosio and H. M. Soner, *A level set approach to the evolution of surfaces of any codimension*, J. Diff. Geom. **43** (1996), 693–737.
16. F. Angrisani, G. Ascione, C. Leone, and C. Mantegazza, *Appunti di calcolo delle variazioni*, Amazon, 2019.
17. D. V. Anosov, *Geodesic flows on closed Riemannian manifolds with negative curvature*, Proceedings of the Steklov Institute of Mathematics, No. 90, Amer. Math. Soc., Providence, RI, 1967, Translated from the Russian by S. Feder.
18. P. A. Ardoy and L. Guijarro, *Cut and singular loci up to codimension 3*, Ann. Inst. Fourier (Grenoble) **61** (2011), no. 4, 1655–1681 (2012).
19. R. Atkins, *When is a connection a metric connection?*, New Zealand J. Math. **38** (2008), 225–238.
20. T. Aubin, *Some nonlinear problems in Riemannian geometry*, Springer-Verlag, 1998.
21. M. Bačák, *Convex analysis and optimization in Hadamard spaces*, De Gruyter Series in Nonlinear Analysis and Applications, vol. 22, De Gruyter, Berlin, 2014.
22. D. Bakry, I. Ivan, and M. Ledoux, *Analysis and geometry of Markov diffusion operators*, Grundlehren der mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences], vol. 348, Springer, 2014.
23. V. Bangert, *Totally convex sets in complete Riemannian manifolds*, J. Diff. Geom. **16** (1981), no. 2, 333–345.
24. M. Bardi and I. Capuzzo Dolcetta, *Optimal control and viscosity solutions of Hamilton–Jacobi–Bellman equations*, Systems & Control: Foundations & Applications, Birkhäuser Boston Inc., Boston, MA, 1997, With appendices by Maurizio Falcone and Pierpaolo Soravia.
25. R. Benedetti, *Lectures on differential topology*, Graduate Studies in Mathematics, vol. 218, Amer. Math. Soc., Providence, RI, 2021.
26. R. Benedetti and P. Lisca, *Framing 3-manifolds with bare hands*, Enseign. Math. **64** (2018), no. 3/4, 395–413.
27. R. Benedetti and C. Mantegazza, *The Poincaré conjecture and the Ricci flow*, Mat. Cult. Soc. Riv. Unione Mat. Ital. (I) **2** (2017), no. 3, 245–290.
28. S. Benvenuti, *Geometrie non euclidee*, Gli spilli, Alpha Test, 2008.
29. M. Berger, *An extension of Rauch’s metric comparison theorem and some applications*, Illinois J. Math. **6** (1962), 700–712.
30. M. Berger, P. Gauduchon, and E. Mazet, *Le spectre d’une variété riemannienne*, Lecture Notes in Mathematics, Vol. 194, Springer-Verlag, Berlin–New York, 1971.
31. A. L. Besse, *Einstein manifolds*, Springer-Verlag, Berlin, 2008.
32. B. Bianchini, L. Mari, and M. Rigoli, *On some aspects of oscillation theory and geometry*, vol. 225, Mem. Amer. Math. Soc., no. 1056, Amer. Math. Soc., Providence, RI, 2013.
33. L. Bieberbach, *Über die Bewegungsgruppen der Euklidischen Räume*, Math. Ann. **70** (1911), no. 3, 297–336.
34. ———, *Über die Bewegungsgruppen der Euklidischen Räume (Zweite Abhandlung). Die Gruppen mit einem endlichen Fundamentalbereich*, Math. Ann. **72** (1912), no. 3, 400–412.
35. R. L. Bishop, *A relation between volume, mean curvature and diameter*, Notices of Amer. Math. Soc. **10** (1963), 364.

36. R. L. Bishop and R. J. Crittenden, *Geometry of manifolds*, Pure and Applied Mathematics, Vol. XV, Academic Press, New York-London, 1964.
37. P. O. Bonnet, *Mémoire sur la théorie des surfaces applicables sur une surface donnée*, J. de l'École Polytechnique, Paris **24** (1865), 209–230.
38. ———, *Mémoire sur la théorie des surfaces applicables sur une surface donnée*, J. de l'École Polytechnique, Paris **25** (1867), 1–151.
39. W. M. Boothby, *An introduction to differential manifolds and Riemannian geometry*, Academic Press, London, 1975.
40. R. Bott and J. W. Milnor, *On the parallelizability of the spheres*, Bull. Amer. Math. Soc. **64** (1958), 87–89.
41. J.-P. Bourguignon and H. Karcher, *Curvature operators: pinching estimates and geometric examples*, Ann. Sci. École Norm. Sup. (4) **11** (1978), no. 1, 71–92.
42. M. R. Bridson and A. Haefliger, *Metric spaces of non-positive curvature*, Springer, 1999.
43. M. Buchner, *The structure of the cut-locus in $\dim \leq 6$* , Compositio Math. **37** (1978), 103–119.
44. M. Burago, Y. Burago, and S. Ivanov, *A course in metric geometry*, Graduate Studies in Mathematics, vol. 33, Amer. Math. Soc., Providence, RI, 2001.
45. E. Calabi, *An extension of E. Hopf's maximum principle with an application to Riemannian geometry*, Duke Math. J. **25** (1958), 45–56.
46. P. Cannarsa and C. Sinestrari, *Semiconcave functions, Hamilton-Jacobi equations, and optimal control*, Progress in Nonlinear Differential Equations and their Applications, vol. 58, Birkhäuser Boston, Inc., Boston, MA, 2004.
47. P. Cannarsa and H. M. Soner, *On the singularities of the viscosity solutions to Hamilton-Jacobi-Bellman equations*, Indiana Univ. Math. J. **36** (1987), 501–524.
48. E. Cartan, *La déformation des hypersurfaces dans l'espace conforme réel à $n \geq 5$ dimensions*, Bull. Soc. Math. France **45** (1917), 57–121.
49. N. Castañeda, *Hessians, warped products and eigenvalues*, Mat. Enseñ. Univ. (N. S.) **15** (2007), no. 1, 13–32.
50. M. Castelpietra and L. Rifford, *Regularity properties of the distance functions to conjugate and cut loci for viscosity solutions of Hamilton-Jacobi equations and applications in Riemannian geometry*, ESAIM Control Optim. Calc. Var. **16** (2010), no. 3, 695–718.
51. G. Catino, C. Mantegazza, and L. Mazziere, *On the global structure of conformal gradient solitons with nonnegative Ricci tensor*, Commun. Contemp. Math. **14** (2012), no. 6, 1250045, 12.
52. G. Catino and P. Mastrolia, *A perspective on canonical Riemannian metrics*, Progress in Mathematics, vol. 336, Birkhäuser/Springer, 2020.
53. I. Chavel, *Riemannian geometry. A modern introduction*, second ed., Cambridge Studies in Advanced Mathematics, vol. 98, Cambridge University Press, Cambridge, 2006.
54. J. Cheeger and T. H. Colding, *Lower bounds on Ricci curvature and the almost rigidity of warped products*, Ann. of Math. (2) **144** (1996), no. 1, 189–237.
55. J. Cheeger and D. G. Ebin, *Comparison theorems in Riemannian geometry*, Amer. Math. Soc., 2008.
56. J. Cheeger and D. Gromoll, *The splitting theorem for manifolds of nonnegative Ricci curvature*, J. Diff. Geom. **6** (1971/72), 119–128.
57. ———, *On the structure of complete manifolds of nonnegative curvature*, Ann. of Math. (2) **96** (1972), 413–443.
58. S. Y. Cheng, *Eigenvalue comparison theorems and its geometric applications*, Math. Z. **143** (1975), no. 3, 289–297.
59. R. A. Chouikha, *Existence of metrics with harmonic curvature and non parallel Ricci tensor*, Balkan J. Geom. Appl. **8** (2003), no. 2, 21–30.
60. D. Codazzi, *Sulle coordinate curvilinee d'una superficie e dello spazio*. I, II, III, 1867–1871.
61. S. Cohn-Vossen, *Zwei Sätze über die Starrheit der Eiflächen*, Göttinger Nachrichten **36** (1927), 125–134.
62. ———, *Kürzeste Wege und Totalkrümmung auf Flächen*, Compositio Math. **2** (1935), 69–133.
63. R. Connelly, *A counterexample to the rigidity conjecture for polyhedra*, Inst. Hautes Études Sci. Publ. Math. (1977), no. 47, 333–338.
64. M. G. Crandall, H. Ishii, and P.-L. Lions, *User's guide to viscosity solutions of second order partial differential equations*, Bull. Amer. Math. Soc. **27/1** (1992), 1–67.
65. M. G. Crandall and P.-L. Lions, *Viscosity solutions of Hamilton-Jacobi equations*, Trans. Amer. Math. Soc. **277** (1983), 1–43.
66. G. Ricci Curbastro and T. Levi Civita, *Méthodes de calcul différentiel absolu et leurs applications*, Math. Ann. **54** (1900), 125–201.
67. M. Dafermos and I. Rodnianski, *Lectures on black holes and linear waves*, Evolution equations, Clay Math. Proc., vol. 17, Amer. Math. Soc., Providence, RI, 2013, pp. 97–205.
68. H. P. de Saint-Gervais, *Uniformization of Riemann surfaces. Revisiting a hundred-year-old theorem*, Heritage of European Mathematics, EMS, 2016.
69. M. Delfour and J.-P. Zolésio, *Shape analysis via oriented distance functions*, J. Funct. Anal. **123** (1994), 129–201.
70. ———, *Shape analysis via distance functions: local theory, Boundaries, interfaces and transitions* (M. Delfour, ed.), CRM Proc. Lect. Notes Ser., Amer. Math. Soc., 1998.
71. S. Della Corte, A. Diana, and C. Mantegazza, *Global existence and stability for the modified Mullins-Sekerka and surface diffusion flow*, Math. Eng. **4** (2022), no. 6, Paper No. 054, 104.
72. A. Derdzinski, *Classification of certain compact Riemannian manifolds with harmonic curvature and non parallel Ricci tensor*, Math. Z. **172** (1980), 277–280.
73. A. Derdzinski, F. Mercuri, and M. H. Noronha, *Manifolds with nonnegative pure curvature operator*, Bol. Soc. Bras. Mat. **18** (1987), 13–22.
74. M. P. do Carmo, *Differential geometry of curves and surfaces*, Prentice-Hall, Englewood Cliffs, New Jersey, 1976.
75. ———, *Riemannian geometry*, Birkhäuser, Boston, 1992.

76. M. P. do Carmo, M. Dajczer, and F. Mercuri, *Compact conformally flat hypersurfaces*, Trans. Amer. Math. Soc. **288** (1985), no. 1, 189–1203.
77. J. Dugundji, *Topology*, Allyn and Bacon, Boston, 1966.
78. P. Eberlein, *Geometry of nonpositively curved manifolds*, Chicago Lectures in Mathematics, University of Chicago Press, Chicago, IL, 1996.
79. P. Eberlein and B. O'Neill, *Visibility manifolds*, Pacific J. Math. **46** (1973), 45–109.
80. N. V. Efimov, *Generation of singularities on surfaces of negative curvature*, Mat. Sb. (N.S.) **64** (106) (1964), 286–320.
81. M. Eminenti and C. Mantegazza, *Some properties of the distance function and a conjecture of De Giorgi*, J. Geom. Anal. **14** (2004), no. 2, 267–279.
82. Encyclopedia of Mathematics, *Weyl problem*, https://encyclopediaofmath.org/wiki/Weyl_problem, 2014.
83. ———, *Surface of negative curvature*, https://encyclopediaofmath.org/wiki/Negative_curvature_surface_of, 2020.
84. J.-H. Eschenburg, *Comparison theorems and hypersurfaces*, Manuscripta Math. **59** (1987), no. 3, 295–323.
85. J.-H. Eschenburg and E. Heintze, *An elementary proof of the Cheeger–Gromoll splitting theorem*, Ann. Global Anal. Geom. **2** (1984), no. 2, 141–151.
86. ———, *Comparison theory for Riccati equations*, Manuscripta Math. **68** (1990), no. 2, 209–214.
87. L. C. Evans, *Partial differential equations*, Graduate Studies in Mathematics, vol. 19, Amer. Math. Soc., Providence, RI, 1998.
88. H. Federer, *Geometric measure theory*, Springer–Verlag, 1969.
89. A. Fialkow, *Hypersurfaces of a space of constant curvature*, Ann. of Math. (2) **39** (1938), no. 4, 762–785.
90. A. Figalli, L. Rifford, and C. Villani, *Necessary and sufficient conditions for continuity of optimal transport maps on Riemannian manifolds*, Tohoku Math. J. **63** (2011), no. 4, 855–876.
91. J. Gallier and D. Xu, *A guide to the classification theorem for compact surfaces*, Geometry and Computing, vol. 9, Springer, Heidelberg, 2013.
92. S. Gallot, D. Hulin, and J. Lafontaine, *Riemannian geometry*, third ed., Universitext, Springer–Verlag, Berlin, 2004.
93. J. O. Garay, *A classification of certain 3-dimensional conformally flat Euclidean hypersurfaces*, Pacific J. Math. **162** (1994), no. 1, 13–25.
94. M. Giaquinta and S. Hildebrandt, *Calculus of variations. I*, Grundlehren der Mathematischen Wissenschaften, vol. 310, Springer–Verlag, Berlin, 1996.
95. N. Gigli, *De Giorgi and Gromov working together*, ArXiv Preprint Server – <http://arxiv.org>, 2023.
96. N. Gigli, K. Kuwada, and S.-I. Ohta, *Heat flow on Alexandrov spaces*, Comm. Pure Appl. Math. **66** (2013), no. 3, 307–331.
97. D. Gilbarg and N. S. Trudinger, *Elliptic partial differential equations of second order*, Springer–Verlag, 1983.
98. V. Gimeno, *Lower bounds for the volume with upper bounds for the Ricci curvature in dimension three*, Bull. London Math. Soc. **53** (2021), 194–203.
99. E. Giusti, *Minimal surfaces and functions of bounded variation*, Monographs in Math., vol. 80, Birkhäuser, Boston, 1984.
100. A. R. Gover and P. Nurowski, *Obstructions to conformally Einstein metrics in n dimensions*, J. Geom. Phys. **56** (2006), no. 3, 450–484.
101. J. E. Graver, *Counting on frameworks*, The Dolciani Mathematical Expositions, vol. 25, Mathematical Association of America, Washington, DC, 2001.
102. A. Gray, *Tubes*, second ed., Progress in Mathematics, vol. 221, Birkhäuser Verlag, Basel, 2004, With a preface by Vicente Miquel.
103. A. Gray and L. Vanhecke, *Riemannian geometry as determined by the volumes of small geodesic balls*, Acta Math. **142** (1979), no. 3-4, 157–198.
104. J. Gray, *On the history of the Riemann mapping theorem*, Rend. Circ. Mat. Palermo (2) Suppl. (1994), no. 34, 47–94.
105. C. Greenhill, *An algorithm for recognising the exterior square of a matrix*, Linear and Multilinear Algebra **46** (1999), no. 3, 213–244.
106. A. Grigor'yan, *Heat kernel and analysis on manifolds*, AMS/IP Studies in Advanced Mathematics, vol. 47, Amer. Math. Soc., Providence, RI; International Press, Boston, MA, 2009.
107. R. Grimaldi and P. Pansu, *Sur la régularité de la fonction croissance d'une variété riemannienne*, Geom. Dedicata **50** (1994), no. 3, 301–307.
108. D. Gromoll and W. Meyer, *On complete open manifolds of positive curvature*, Ann. of Math. (2) **90** (1969), 75–90.
109. M. Gromov, *Curvature, diameter and Betti numbers*, Comment. Math. Helv. **56** (1981), no. 2, 179–195.
110. ———, *Structures métriques pour les variétés riemanniennes*, Textes Mathématiques [Mathematical Texts], vol. 1, CEDIC, Paris, 1981, Edited by J. Lafontaine and P. Pansu.
111. P. Günther, *Einige Sätze über das Volumenelement eines Riemannschen Raumes*, Publ. Math. Debrecen **7** (1960), 78–93.
112. J. Hadamard, *Sur certaines propriétés des trajectoires en dynamique*, J. Math. Pures Appl. **3** (1897), 331–387.
113. R. S. Hamilton, *Three-manifolds with positive Ricci curvature*, J. Diff. Geom. **17** (1982), no. 2, 255–306.
114. Q. Han and J.-X. Hong, *Isometric embedding of Riemannian manifolds in Euclidean spaces*, Mathematical Surveys and Monographs, vol. 130, Amer. Math. Soc., Providence, RI, 2006.
115. Q. Han, J.-X. Hong, and C.-S. Lin, *Local isometric embedding of surfaces with nonpositive Gaussian curvature*, J. Diff. Geom. **63** (2003), no. 3, 475–520.
116. J. Harper and M. J. Greenberg, *Algebraic topology: A first course*, Mathematics Lecture Note Series, vol. 58, The Benjamin/Cummings Publishing Company, 1981.
117. A. Hatcher, *Algebraic topology*, Cambridge University Press, Cambridge, 2002.

118. S. W. Hawking and G. F. R. Ellis, *The large scale structure of space-time*, Cambridge University Press, London–New York, 1973, Cambridge Monographs on Mathematical Physics, No. 1.
119. E. Heintze and H. Karcher, *A general comparison theorem with applications to volume estimates for submanifolds*, Ann. Sci. École Norm. Sup. (4) **11** (1978), no. 4, 451–470.
120. D. Hilbert, *Ueber Flächen von constanter Gausscher Krümmung*, Trans. Amer. Math. Soc. **2** (1901), no. 1, 87–99.
121. N. Hitchin, *Compact four-dimensional Einstein manifolds*, J. Diff. Geom. **9** (1974), 435–441.
122. J. Hong, *Some new developments of realization of surfaces into $\mathbb{R}^3$* , Proc. Int. Cong. Math., 2002, pp. 155–165.
123. H. Hopf and W. Rinow, *Über den begriff der vollständigen differential-geometrischen Flächen*, Comment. Math. Helv. **3** (1931), 209–225.
124. R. A. Horn and C. R. Johnson, *Topics in matrix analysis*, Cambridge University Press, Cambridge, 1994.
125. R. Howard, *Riemannian manifolds without conjugate points: a lecture on a theorem of Hopf and Green*, http://people.math.sc.edu/howard/Notes/hopf_note.pdf, 1994.
126. G. Huisken, *Flow by mean curvature of convex surfaces into spheres*, J. Diff. Geom. **20** (1984), 237–266.
127. H. Ishii, *On the equivalence of two notions of weak solutions, viscosity solutions and distribution solutions*, Funkcial. Ekvac. **38** (1995), no. 1, 101–120.
128. J. Itoh and M. Tanaka, *The Lipschitz continuity of the distance function to the cut locus*, Trans. Amer. Math. Soc. **353** (2001), no. 1, 21–40.
129. W. Klingenberg, *Riemannian geometry*, W. de Gruyter, Berlin, 1982.
130. R. Kobayashi, *Moduli of Einstein metrics on a $K3$ surface and degeneration of type I*, Kähler metric and moduli spaces, Adv. Stud. Pure Math., vol. 18, Academic Press, Boston, MA, 1990, pp. 257–311.
131. S. Kobayashi and K. Nomizu, *Foundations of differential geometry. Vol. I*, Wiley Classics Library, John Wiley & Sons Inc., New York, 1996.
132. ———, *Foundations of differential geometry. Vol. II*, Wiley Classics Library, John Wiley & Sons Inc., New York, 1996.
133. C. N. Kozameh, E. T. Newman, and K. P. Tod, *Conformal Einstein spaces*, Gen. Relativity Gravitation **17** (1985), no. 4, 343–352.
134. U. Lang, *Length Spaces*, <https://people.math.ethz.ch/~lang/LengthSpaces.pdf>, 2013.
135. H. B. Lawson, Jr., *Local rigidity theorems for minimal hypersurfaces*, Ann. of Math. (2) **89** (1969), 187–197.
136. J. M. Lee, *Manifolds and differential geometry*, Graduate Studies in Mathematics, vol. 107, Amer. Math. Soc., Providence, RI, 2009.
137. J. M. Lee, *Introduction to smooth manifolds*, second ed., Graduate Texts in Mathematics, vol. 218, Springer, 2013.
138. ———, *Introduction to Riemannian manifolds*, second ed., Graduate Texts in Mathematics, vol. 176, Springer, 2018.
139. Y. Li and L. Nirenberg, *The distance function to the boundary, Finsler geometry, and the singular set of viscosity solutions of some Hamilton–Jacobi equations*, Comm. Pure Appl. Math. **58** (2005), no. 1, 85–146.
140. E. L. Lima, *Fundamental groups and covering spaces*, A K Peters, Ltd., Natick, MA, 2003, Translated from the Portuguese by Jonas Gomes.
141. P.-L. Lions, *Generalized solutions of Hamilton–Jacobi equations*, Pitman, Boston, 1982.
142. ———, *Optimal control of diffusion processes and Hamilton–Jacobi–Bellman equations. II. Viscosity solutions and uniqueness*, Comm. Partial Differential Equations **8** (1983), no. 11, 1229–1276.
143. J. Lohkamp, *Metrics of negative Ricci curvature*, Ann. of Math. (2) **140** (1994), no. 3, 655–683.
144. J. Lott and C. Villani, *Ricci curvature for metric–measure spaces via optimal transport*, Ann. of Math. (2) **169** (2009), no. 3, 903–991.
145. G. Mainardi, *Su la teoria generale delle superfici*, Giornale dell’I. R. Lombardo di Scienze, Lettere ed Arti **9** (1856), 385–399.
146. C. Mancinelli, M. Livesu, and E. Puppo, *Practical computation of the cut locus on discrete surfaces*, Computer Graphics Forum **40** (2021), no. 5, 261–273.
147. C. Mantegazza, *Notes on the distance function from a submanifold*, CvGmt Preprint Server – <http://cvgmt.sns.it>, 2010.
148. ———, *Lecture notes on mean curvature flow*, Progress in Mathematics, vol. 290, Birkhäuser/Springer Basel AG, Basel, 2011.
149. ———, *Smooth geometric evolutions of hypersurfaces and singular approximation of mean curvature flow*, Ph.D. thesis, Scuola Normale Superiore di Pisa, 2014.
150. C. Mantegazza, G. Mascellani, and G. Uraltsev, *On the distributional Hessian of the distance function*, Pacific J. Math. **270** (2014), no. 1, 151–166.
151. C. Mantegazza and A. C. Mennucci, *Hamilton–Jacobi equations and distance functions on Riemannian manifolds*, Appl. Math. Opt. **47** (2003), no. 1, 1–25.
152. J. E. Marsden and T. S. Ratiu, *Introduction to mechanics and symmetry*, second ed., Texts in Applied Mathematics, vol. 17, Springer–Verlag, New York, 1999.
153. W. S. Massey, *Algebraic topology: an introduction*, Springer–Verlag, New York–Heidelberg, 1977, Reprint of the 1967 edition, Graduate Texts in Mathematics, Vol. 56.
154. ———, *A basic course in algebraic topology*, Graduate Texts in Mathematics, vol. 127, Springer–Verlag, New York, 1991.
155. MathOverflow, *Positive sectional curvature does not imply positive definite curvature operator?*, <https://mathoverflow.net/q/264896>.
156. F. Mercuri and P. Piccione, *On the closed geodesic problem*, São Paulo J. Math. Sci. **2** (2008), no. 1, 223–237.
157. J. W. Milnor, *Morse theory*, Annals of Mathematics Studies, No. 51, Princeton University Press, Princeton, N. J., 1963.
158. T. K. Milnor, *Efimov’s theorem about complete immersed surfaces of negative curvature*, Advances in Math. **8** (1972), 474–543.
159. O. Müller, *A note on closed isometric embeddings*, J. Math. Anal. Appl. **349** (2009), no. 1, 297–298.

160. S. B. Myers, *Connections between differential geometry and topology*, Duke Math. J. **1** (1935), 376–391.
161. ———, *Riemannian manifolds in the large*, Duke Math. J. **1** (1935), no. 1, 39–49.
162. ———, *Connections between differential geometry and topology II*, Duke Math. J. **2** (1936), 95–102.
163. ———, *Riemannian manifolds with positive mean curvature*, Duke Math. J. **8** (1941), 401–404.
164. S. B. Myers and N. E. Steenrod, *The group of isometries of a Riemannian manifold*, Ann. of Math. (2) **40** (1939), no. 2, 400–416.
165. N. Nadirashvili and Y. Yuan, *Improving Pogorelov's isometric embedding counterexample*, Calc. Var. Partial Differential Equations **32** (2008), no. 3, 319–323.
166. J. Nash, *The imbedding problem for Riemannian manifolds*, Ann. of Math. (2) **63** (1956), no. 1, 20–63.
167. S. Nishikawa and Y. Maeda, *Conformally flat hypersurfaces in a conformally flat Riemannian manifold*, Tohoku Math. J. (2) **26** (1974), 159–168.
168. M. Obata, *Certain conditions for a Riemannian manifold to be isometric with a sphere*, J. Math. Soc. Japan **14** (1962), 333–340.
169. R. Osserman, *A survey of minimal surfaces*, second ed., Dover Publications, Inc., New York, 1986.
170. G. Perelman, *Proof of the soul conjecture of Cheeger and Gromoll*, J. Differential Geom. **40** (1994), no. 1, 209–212.
171. P. Petersen, *Riemannian geometry*, Graduate Texts in Mathematics, vol. 171, Springer, New York, 1998.
172. ———, *Riemannian geometry*, second ed., Graduate Texts in Mathematics, vol. 171, Springer, New York, 2006.
173. ———, *Riemannian geometry*, third ed., Graduate Texts in Mathematics, vol. 171, Springer, New York, 2016.
174. K. M. Peterson, *Über die Biegung der Flächen*, Ph.D. thesis, Doctoral Thesis, Dorpat Univ., 1853.
175. L. C. Piccinini, G. Stampacchia, and G. Vidossich, *Equazioni differenziali ordinarie in $\mathbf{R}^n$ (problemi e metodi)*, Serie di Matematica e Fisica, Liguori Editore, Napoli, 1979.
176. C. Pignotti, *Rectifiability results for singular and conjugate points of optimal exit time problems*, J. Math. Anal. Appl. **270** (2002), no. 2, 681–708.
177. Ė. G. Poznjak, *Isometric imbedding of two-dimensional Riemannian metrics in Euclidean spaces*, Uspehi Mat. Nauk **28** (1973), no. 4(172), 47–76.
178. M. H. Protter and H. F. Weinberger, *Maximum principles in differential equations*, Springer-Verlag, New York, 1984.
179. H. E. Rauch, *A contribution to differential geometry in the large*, Ann. of Math. (2) **54** (1951), 38–55.
180. L. Rifford, *On viscosity solutions of certain Hamilton-Jacobi equations: regularity results and generalized Sard's theorems*, Comm. Partial Differential Equations **33** (2008), no. 1-3, 517–559.
181. W. Rudin, *Real and complex analysis*, McGraw Hill, New York, 1966.
182. ———, *Functional analysis*, second ed., International Series in Pure and Applied Mathematics, McGraw-Hill, Inc., New York, 1991.
183. P. J. Ryan, *Homogeneity and some curvature conditions for hypersurfaces*, Tohoku Math. J. (2) **21** (1969), 363–388.
184. I. Kh. Sabitov, *Local theory of bendings of surfaces*, Geometry, III, Encyclopaedia Math. Sci., vol. 48, Springer, Berlin, 1992, pp. 179–256.
185. T. Sakai, *Riemannian geometry*, Amer. Math. Soc., 1996.
186. V. A. Šarafutdinov, *Convex sets in a manifold of nonnegative curvature*, Mat. Zametki **26** (1979), no. 1, 129–136, 159.
187. J.-P. Sha and D. Yang, *Positive Ricci curvature on the connected sums of $S^n \times S^m$* , J. Differential Geom. **33** (1991), no. 1, 127–137.
188. ———, *Positive Ricci curvature on compact simply connected 4-manifolds*, Differential geometry: Riemannian geometry (Los Angeles, CA, 1990), Proc. Sympos. Pure Math., vol. 54, Amer. Math. Soc., Providence, RI, 1993, pp. 529–538.
189. L. Simon, *Lectures on geometric measure theory*, Proc. Center Math. Anal., vol. 3, Australian National University, Canberra, 1983.
190. J. Simons, *Minimal varieties in Riemannian manifolds*, Ann. of Math. (2) **88** (1968), 62–105.
191. D. H. Singley, *Smoothness theorems for the principal curvatures and principal vectors of a hypersurface*, Rocky Mountain J. Math. **5** (1975), 135–144.
192. A. B. Skopenkov, *Embedding and knotting of manifolds in Euclidean spaces*, Surveys in contemporary mathematics, London Math. Soc. Lecture Note Ser., vol. 347, Cambridge Univ. Press, Cambridge, 2008, pp. 248–342.
193. M. Spivak, *A comprehensive introduction to differential geometry (5 volumes)*, second ed., Publish or Perish, Inc., Wilmington, Del., 1979.
194. S. Steiner, E. Teufel, and J. Vilms, *On the Gauss equation of an isometric immersion*, Duke Math. J. **51** (1984), no. 2, 421–430.
195. J. J. Stoker, *Über die Gestalt der positiv gekrümmten offenen Flächen im dreidimensionalen Raume*, Compositio Math. **3** (1936), 55–88.
196. M. Struwe, *Variational methods*, Springer-Verlag, Berlin, 1990.
197. K.-T. Sturm, *On the geometry of metric measure spaces. I*, Acta Math. **196** (2006), no. 1, 65–131.
198. ———, *On the geometry of metric measure spaces. II*, Acta Math. **196** (2006), no. 1, 133–177.
199. J. L. Synge, *The first and second variations of the length-integral in Riemannian spaces*, Proc. London Math. Soc. (2) **25** (1926), 247–264.
200. ———, *On the connectivity of spaces of positive curvature*, Quart. J. Math. Oxford Ser. **7** (1936), 316–320.
201. Y. Tashiro, *Complete Riemannian manifolds and some vector fields*, Trans. Amer. Math. Soc. **117** (1965), 251–275.
202. I. Terek, *A few formulas with covariant exterior derivatives*, <https://web.williams.edu/Mathematics/it3/texts>.
203. T. Y. Thomas, *Riemann spaces of class one and their characterization*, Acta Math. **67** (1936), no. 1, 169–211.
204. C. Thomassen, *The Jordan-Schönflies theorem and the classification of surfaces*, Amer. Math. Monthly **99** (1992), no. 2, 116–130.
205. W. P. Thurston, *Three-dimensional manifolds, Kleinian groups and hyperbolic geometry*, Bull. Amer. Math. Soc. (N.S.) **6** (1982), no. 3, 357–381.

206. V. A. Toponogov, *Riemann spaces with curvature bounded below*, Uspehi Mat. Nauk **14** (1959), no. 1(85), 87–130.
207. J. Vilms, *Local isometric imbedding of Riemannian n -manifolds into Euclidean $(n + 1)$ -space*, J. Diff. Geom. **12** (1977), no. 2, 197–202.
208. ———, *Factorization of curvature operators*, Trans. Amer. Math. Soc. **260** (1980), no. 2, 595–605.
209. X. Wang, *Remark on an inequality for closed hypersurfaces in complete manifolds with nonnegative Ricci curvature*, Ann. Fac. Sci. Toulouse Math. (6) **32** (2023), no. 1, 173–178.
210. F. W. Warner, *The conjugate locus of a Riemannian manifold*, Amer. J. Math. **87** (1965), 575–604.
211. ———, *Extensions of the Rauch comparison theorem to submanifolds*, Trans. Amer. Math. Soc. **122** (1966), 341–356.
212. ———, *Conjugate loci of constant order*, Ann. of Math. (2) **86** (1967), 192–212.
213. ———, *Foundations of differentiable manifolds and Lie groups*, Springer, 1983.
214. A. Weinstein, *The cut-locus and conjugate points of a Riemannian manifold*, Ann. of Math. (2) **68** (1987), 29–41.
215. H. Weyl, *On the volume of tubes*, Amer. J. Math. **61** (1939), no. 2, 461–472.
216. J. H. C. Whitehead, *The immersion of an open 3-manifold in Euclidean 3-space*, Proc. London Math. Soc. (3) **11** (1961), 81–90.
217. H. Whitney, *The self-intersections of a smooth n -manifold in $2n$ -space*, Ann. of Math. (2) **45** (1944), no. 2, 220–246.
218. ———, *The singularities of a smooth n -manifold in $(2n - 1)$ -space*, Ann. of Math. (2) **45** (1944), no. 2, 247–293.
219. Wikipedia, *Beltrami–Klein model*, https://en.wikipedia.org/wiki/Beltrami-Klein_model.
220. ———, *Bernhard Riemann*, https://it.wikipedia.org/wiki/Bernhard_Riemann.
221. ———, *Cartan–Hadamard conjecture*, https://en.wikipedia.org/wiki/Cartan-Hadamard_conjecture.
222. ———, *Congettura di geometrizzazione di Thurston*, https://it.wikipedia.org/wiki/Congettura_di_geometrizzazione_di_Thurston.
223. ———, *Constant-mean-curvature surface*, https://en.wikipedia.org/wiki/Constant-mean-curvature_surface.
224. ———, *Einstein tensor*, https://en.wikipedia.org/wiki/Einstein_tensor.
225. ———, *Eugenio Beltrami*, https://it.wikipedia.org/wiki/Eugenio_Beltrami.
226. ———, *Felix Klein*, https://it.wikipedia.org/wiki/Felix_Klein.
227. ———, *Georg Simon Klügel*, https://en.wikipedia.org/wiki/Georg_Simon_Klügel.
228. ———, *Giovanni Girolamo Saccheri*, https://it.wikipedia.org/wiki/Giovanni_Girolamo_Saccheri.
229. ———, *Gregorio Ricci Curbastro*, https://it.wikipedia.org/wiki/Gregorio_Ricci_Curbastro.
230. ———, *Hermann Weyl*, https://it.wikipedia.org/wiki/Hermann_Weyl.
231. ———, *Hilbert’s theorem (differential geometry)*, [https://en.wikipedia.org/wiki/Hilbert’s_theorem_\(differential_geometry\)](https://en.wikipedia.org/wiki/Hilbert’s_theorem_(differential_geometry)).
232. ———, *Hopf fibration*, https://en.wikipedia.org/wiki/Hopf_fibration.
233. ———, *János Bolyai*, https://it.wikipedia.org/wiki/János_Bolyai.
234. ———, *Jean-Louis Koszul*, https://en.wikipedia.org/wiki/Jean-Louis_Koszul.
235. ———, *K3 surface*, https://en.wikipedia.org/wiki/K3_surface.
236. ———, *Klein bottle*, https://en.wikipedia.org/wiki/Klein_bottle.
237. ———, *Luigi Bianchi*, https://it.wikipedia.org/wiki/Luigi_Bianchi.
238. ———, *Metrica intrinseca*, https://it.wikipedia.org/wiki/Metrica_intrinseca.
239. ———, *Minimal surface*, https://en.wikipedia.org/wiki/Minimal_surface.
240. ———, *Nash embedding theorem*, https://en.wikipedia.org/wiki/Nash_embedding_theorem.
241. ———, *Nikolai Lobachevsky*, https://en.wikipedia.org/wiki/Nikolai_Lobachevsky.
242. ———, *Pierre Ossian Bonnet*, https://en.wikipedia.org/wiki/Pierre_Ossian_Bonnet.
243. ———, *Pullback bundle*, https://en.wikipedia.org/wiki/Pullback_bundle.
244. ———, *Ricci flow*, https://en.wikipedia.org/wiki/Ricci_flow.
245. ———, *Spazio lenticolare*, https://it.wikipedia.org/wiki/Spazio_lenticolare.
246. ———, *Superficie di Dini*, https://it.wikipedia.org/wiki/Superficie_di_Dini.
247. ———, *Teorema del confronto di Sturm–Picone*, https://it.wikipedia.org/wiki/Teorema_del_confronto_di_Sturm-Picone.
248. ———, *Theorem of the three geodesics*, https://en.wikipedia.org/wiki/Theorem_of_the_three_geodesics.
249. ———, *Tullio Levi–Civita*, https://it.wikipedia.org/wiki/Tullio_Levi-Civita.
250. ———, *Uniformization theorem*, https://en.wikipedia.org/wiki/Uniformization_theorem.
251. ———, *Yamabe problem*, https://en.wikipedia.org/wiki/Yamabe_problem.
252. J. A. Wolf, *Spaces of constant curvature*, sixth ed., Amer. Math. Soc., Providence, RI, 2011.
253. W. Ziller, *Examples of Riemannian manifolds with non-negative sectional curvature*, Surveys in differential geometry. Vol. XI, Surv. Differ. Geom., vol. 11, Int. Press, Somerville, MA, 2007, pp. 63–102.