

List of selected publications by Vasyl Gorkavyy

1. Borisenko A.A., Gorkavyy V.O., *Degenerate Bianchi transformations for three-dimensional pseudo-spherical submanifolds in R^5* // arxiv:2002.04882, 2020, 16 pp
2. Gorkavyy V., Posylaieva R., *On the sharpness of one integral inequality for closed curves in R^4* // Journal of mathematical physics, analysis, geometry, v.15 (2019), №4, p.502-509. MR4041862
3. Gorkavyy V., Fesenko I., *On the flexibility of Siamese dipyramids* // Journal of Geometry, v.110 (2019), № 1:7, p.1-19. MR3892990
4. Gorkavyy V., Milka A. D., *Birosettes are model flexors* // Ukrainian Mathematical Journal, v.70 (2018), № 7, p.885-904. MR3846095
5. Gorkavyy V., Kalinin D., *On model flexibility of the Jessen orthogonal icosahedron* // Contributions to Algebra and Geometry, v.57 (2016), № 3, p.607-622. MR3535071
6. Gorkavyy V., Nevmerzhitska O., *Degenerate Backlund transformation* // Ukrainian Mathematical Journal, v. 68 (2016), № 1, c.41-56. MR3541302
7. Gorkavyy V., Kalinin D., *Barker-Larman problem for convex polygons in the hyperbolic plane* // Results in mathematics, v. 68 (2015), № 3, c.519-525. MR3407571
8. Borisenko A., Gorkavyy V., *In memory of Valentin Ivanovich Diskant* // Journal of Mathematical Physics, Analysis, Geometry, v.11 (2015), № 2, p.187-196.
9. Gorkavyy V., *Generalization of the Bianchi–Bäcklund Transformation of Pseudo-Spherical Surfaces* // Journal of Mathematical Sciences, т.2007 (2015), № 3, p.467-484.
10. Gorkavyy V., Logachev V., Kravtsov O., Isaev Yu. et al., *Features of autotransplantations for treating subfacial singses of persons of advanced age* // Clinical Surgery (Zaytsev Institute of General and Urgent Surgery, Kharkov), № 11.3 (2014), p.54 (Ukrainian).
11. Gorkavyy V., *An example of Bianchi transformation in E^4* // Journal of Mathematical Physics, Analysis, Geometry, v.8 (2012), № 3, p. 240-247. MR3053204

12. Gorkavyy V., Nevmerzhytska O., *An analogue of the Bianchi transformation for two-dimensional surfaces in the space $S^3 \times R^1$* // *Mathematical Notes*, v.89 (2011), №6, p.833-845 (Russian).
13. Gorkavyy V., Nevmerzhytska O., *Pseudo-spherical submanifolds with degenerate Bianchi transformation* // *Results in Mathematics*, v.60 (2011), №1, p.103-116. MR2836888 (2012k:53008)
14. Gorkavyy V., Nevmerzhytska O., *On pseudo-spherical surfaces with a degenerate Bianchi transformation* // *Ukrainian Mathematical Journal*, v.63 (2011), №11, p.1460-1468. MR3109680
15. Gorkavyy V., *On volume increasing bendings for closed surfaces of rotation* // *Actual problems in mathematics and mechanics (Moscow State University)*, v.6 (2011), №2, p.195-205 (Russian).
16. Gorkavyy V., *On inflating closed mylar shells* // *Comptes Rendus. Mecanique*, v.338 (2010), №12, p.656-662
17. Gorkavyy V., Milka A.D., *Volume increasing linear bendings of right polyhedra* // *Proceedings of Institute of mathematics of NAS of Ukraine*, v.6 (2009), №2, p.152-182 (Russian).
18. Gorkavyy V., Nevmerzhytska O., *Ruled surfaces as pseudo-spherical congruencies* // *Journal of mathematical physics, analysis, geometry*, v.5 (2009), №4, p.359-374.
19. Gorkavyy V., *On minimal lightlike surfaces in Minkowski space-time.* // *Differential Geometry and its Applications*, v.26 (2008), №2, p.133-139. MR2406446 (2009m:53042)
20. Gorkavyy V., *On conformal transformations of surfaces in Minkowski space with preservation of the Gauss image* // *Russian Math. (Iz. VUZ)*, v.50 (2006), №7, p.11-21; translated from *Izvestiya VUZov*, (2006), №7, p.13-24 (Russian). MR2281885 (2007j:53017)
21. Gorkavyy V., *On pseudospherical surfaces in E^4 with Grassmann image of prescribed type* // *Journal of mathematical physics, analysis, geometry*, v.2 (2006), №2, p.138-148. MR2222688 (2007c:53007)
22. Gorkavyy V., *Bianchi congruencies for two-dimensional surfaces in E^4* // *Sbornik: Mathematics*, v.196 (2005), №9-10, p.1473-1493; translation from

- Matematicheskii Sbornik, v.196 (2005), №10, p.79-102 (Russian).
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23. Bolotov D., Gorkavyy V., Makarov V., Yatsenko A., *New type of topological electronic transitions in metals with a change in the Fermi surface // Low temperature physics*, v.31 (2005), №3-4, p.321-325.
24. Gorkaviy V., Aminov Yu.A., Sviatovets A.V., *On the reconstruction of particular closed surface in E^4 from a given closed Grassmann image // Matematicheskaya Fizika, Analiz, Geometria*, v.11 (2004), №1, p.3-24 (Russian).
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25. Gorkavyy V., *On pseudo-spherical congruencies in E^4 // Matematicheskaya Fizika, Analiz, Geometria*, v.10 (2003), №4, p.498-504. MR2020823 (2004k:53008)
26. Gorkaviy V., *Deformations of two-dimensional surfaces that preserve the Gauss image // Syberian advances in mathematics*, v.13 (2003), №4, p.7-29.
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27. Gorkavyy V., Aminov Yu.A., *On the Gauss curvature of closed surfaces in E^3 and E^4 // Matematicheskaya Fizika, Analiz, Geometria*, v.8 (2001), №1, p.3-16, (Russian). MR1846355 (2002i:53009)
28. Gorkaviy V., *Deformations of two-dimensional surfaces that preserve parabolic Grassmann image // Vestnik Kharkovskogo Universiteta (Notices of Kharkov University)*, v.475 (2000), p.313-322 (Russian).
29. Gorkaviy V., *Reconstruction of particular submanifolds of Euclidean space from a given Grassmann image // Matematicheskaya Fizika, Analiz, Geometria*, v.7 (2000), №2, p.131-152 (Russian). MR1788191 (2001g:53010)
30. Gorkavyy V., *Theorem of reduction in the problem of reconstruction of submanifolds in Euclidean space from a given Grassmannian image // Matematicheskaya Fizika, Analiz, Geometria*, v.4 (1997), №3, p.309-333, (Russian). MR1615816 (99d:53008)
31. Gorkavyy V., *Reconstruction of three-dimensional submanifolds of Euclidean space with large codimension from its Grassmannian image // Mathematical Notes*, v.62 (1997), №5-6, p.581-585; translation from *Matematicheskie Zametki*, v.62 (1997), №5, p.694-699 (Russian). MR1627927 (99f:53057)
32. Gorkavyy V., *An analogue of the Grassmannian image for submanifolds of a sphere // Sbornik: Mathematics*, v.187 (1996), №9, p.1283-1300; translation

from *Matematicheskii Sbornik*, v.187 (1996), №9, p.25-44 (Russian).
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33. Gorkavyy V., *Reconstruction of a submanifold of Euclidean space from its Grassmannian image that degenerates into a line* // *Mathematical Notes*, v.59 (1996), №5, p. 490-497; translation from *Matematicheskie Zametki*, v.59 (1996), №5, p.681-691 (Russian). MR1445449 (98e:53006)
34. Gorkavyy V., *One integral inequality for closed curve in Euclidean space* // *C. R. Acad. Sci., Paris, Ser. I*, v.321 (1995), №12, p.1587-1591. MR1367812 (96m:53003)