

Publications since 1998

1. Weierstrass type representation of harmonic maps into symmetric spaces (with F. Pedit and H. Wu), *Comm. Anal.Geom.*, 6 (1998) 633-668
2. Homogeneous Kahler and Pseudo-Kahler Manifolds, Conference Proceedings, Differential Geometry, Scientific Bulletin Polytechnica University of Bucharest 55 (1993) 89-103.
3. Systems of PDEs obtained from factorization in loop groups (with H. Gradl and J. Szmigielski) *Acta Appl. Math.* 53, (1998), 1-58
4. On the Meromorphic Potential for a Harmonic Surface in a k -Symmetric Space (with I. McIntosh, F. Pedit and H. Wu) *Manuscripta Math.* 92, (1997), 143-152
5. Meromorphic Potentials and Smooth CMC Surfaces (with G. Haak), *Math Z.*, 224 (1997) 603-640.
6. Symmetric Cones, *Topics in Geometry*, S. Gindikin (ed.) Birkhauser 1996, 101-123.
7. Constant Mean Curvature Surfaces, Harmonic Maps, and Loop Groups, Proceedings of "Geometry Colloquium 1995", Munich.
8. On symmetries of constant mean curvature surfaces, Part I: General Theory (with G. Haak) *Tohoku Math J.* 50, (1998), 437 - 454
9. On symmetries of constant mean curvature surfaces, Part II: Symmetries in a Weierstrass-type representation, *Int. J Math., Game Th. and Algebra* 10,(2000), 121 - 146
10. On constant mean curvature surfaces with periodic metric (with G. Haak), *Pacific J. Math.* 182, (1998), 229 - 287
11. Investigation and application of the dressing action on surfaces of constant mean curvature (with G. Haak), *Quart. J.Math.*, 51 (2000), 57 -73
12. Minimal surfaces via loop groups (with F. Pedit and M. Toda), *Balkan J. Geom. Appl.*, 2 ,(1997) , 25-40
13. Construction of non-simply connected CMC surfaces via dressing (with G. Haak), *J.Math.Soc.Japan*, 55 , (2003) 335 - 364
14. Weierstrass-type representation of affine spheres (with U. Eitner), *Abh. Math. Sem. Univ. Hamburg* 71(2001), 225-250
15. Birkhoff decomposition and Iwasawa decomposition for general untwisted loop groups (with V. Balan), *Tohoku Math.J.* 53 (2001), 593-615
16. A Weierstrass-type representation for harmonic maps from Riemann surfaces to general Lie groups, (with V. Balan), *Balkan J. Geom. Appl.* 5 (2000), no. 1, 7-37

17. Finite Type Lorentz Harmonic Maps and the Method of Symes, (with I.Sterling), Differential Geom.Appl. 17 (2002), 43-53
18. Weierstraß-type representation of timelike surfaces with constant mean curvature (with J.-I. Inoguchi and M.Toda), in Differential Geometry and Integrable Systems, Contemporary Mathematics 308 (2002), 77-99
19. Generalized Weierstraß Representations of Surfaces, Surveys on Geometry and Integrable Systems, Advanced Studies in Pure Mathematics 51 (2008), 55-111
20. Pluriharmonic maps, loop groups and twistor theory, (with. J.Eschenburg), Ann.Global.Anal.Geom. 24 (2003), 301-321
21. Konstruktion von Trinoiden und anderen Flächen konstanter mittlerer Krümmung, 27. Kolloquium über Differentialgeometrie, Würzburg, 2002
22. Dressing preserving the fundamental group (with M.Kilian), Differential Geom.Appl.23 (2005), 176-204
23. Weierstraß- type representation for harmonic maps into general symmetric spaces via loop groups (with V. Balan), J.Math.Soc.Japan 57 (2005), 69-94
24. Harmonic maps into general symmetric spaces via loop groups (with V. Balan), Conference Proceedings: Recent Advances in Geometry and Topology, Cluj-Napoca 2004, 49 - 64
25. Coarse classification of CMC-cylinders (with S. Kobayashi), Trans.Amer.Math.Soc. 359 (2007), 2483 - 2500
26. Konstruktion von Flächen aus automorphen Formen, Festschrift zum siebzigsten Geburtstag von Prof.Dr.A.Leutbecher 2004
27. Unitarization of Loop Group Representations of Fundamental Groups (with H.Wu), Nagoya Math. J. 187 (2007), 1-33
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29. Construction of planar CMC 4-noids of genus $g=0$ (with M.Schuster), JP Jour. Geometry and Topology 6 (2006), 319-381
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31. Rotational Hypersurfaces of periodic mean curvature, (with K.Kenmotsu), Differential Geometry and its Applications 27 (2009), 702-712
32. On a Theorem by Hsiang and Yu, (with K.Kenmotsu), Ann.Glob.Anal.Geom. 33 (2008), 245-252
33. Coarse classification of CMC-trinoids of genus $g=0$ and embedded ends, Oberwolfach Reports 24 (2007) 1365-1368
34. Associated families of immersions versus curved flats, Proceedings of the 8th International Workshop on Differential Geometry and its Applications p. 141-151, Cluj-Napoca 2007

35. Complex surfaces of constant mean curvature fibered by minimal surfaces, (with S.Kobayashi and F.Pedit), Hokkaido Math.J. 39 (2010), 1-55
36. CMC-trinoids with embedded ends: a closer look, (with Ph.Lang), in Geometry related to the theory of integrable systems, 99-119, RIMS Kokyuroku 1605, RIMS, Kyoto 2008,
37. Real Fuchsian Equations and Constant Mean Curvature Surfaces, (with J. Eschenburg), in *matematica contemporanea* 35 (2008) 1-26
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42. The Björling problem for non-minimal constant mean curvature surfaces (with D.Brandner), *Comm. Anal.Geom.* 18 (2010), 171-194
43. Conformal Asymptotics of Properly Embedded Annular CMC Ends, *Pac. J.Appl. Math.* 3 (2011) 1-10 , H.Wu Memorial Volume,
44. Triviality of the dressing isotropy for a Smyth type potential and nonclosing of the resulting CMC surfaces (joint with W. Rossman), *Exploratory Weekshop on Differential Geometry and its applications 2009*, p.61-70 Cluj University Press 2011
45. On a relation between potentials for pluriharmonic maps and para-pluriharmonic maps (with N. Boumuki) *Results in Mathematics* 63 (2013) 335-376
46. On a relation between potentials for pluriharmonic maps and para-pluriharmonic maps (with N. Boumuki), *Proceedings of the Fourteenth International Workshop on Diff.Geom.* 14 (2010) 217-233
47. Darboux transforms and simple factor dressing of constant mean curvature surfaces (with F. Burstall, K.Leschke and A. Quintino) *manuscripta mathematica* 140 (2013) 213-236
48. Open Iwasawa cells and applications to surface theory, in: *Variational Problems in Differential Geometry*, London Math.Soc. LN 394, p. 56-67, Cambridge 2012
49. Willmore surfaces in S^{n+2} by the loop group method I: generic cases and some examples (joint with P. Wang), submitted
50. Harmonic maps of finite uniton type into non-compact inner symmetric spaces (joint with P.Wang), submitted
51. A loop group method for minimal surfaces in the three-dimensional Heisenberg group (joint with J.Inoguchi and S. Kobayashi), to appear in *Asian J.Math.*

52. Pseudospherical surfaces of low degree of differentiability (joint with I.Sterling) to appear in *Advances Geom.*
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55. On symmetric Willmore surfaces in spheres I: the orientation preserving case (joint with Peng Wang), to appear in *J.Diff.Appl.*
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57. A loop group method for affine harmonic maps into Lie groups (joint with J.Inoguchi and S.Kobayashi) submitted
58. A new look at equivariant minimal Lagrangian surfaces in CP^2 , (joint with H.Ma), to appear in proceedings of the Japan-China meeting 2014
59. A solution to the Bernstein problem in the three-dimensional Heisenberg group via loop groups (joint with J.Inoguchi and S.Kobayashi), to appear in *Canadian Mathematics Bulletin*
60. Explicit expressions for the Iwasawa factors, the metric and the monodromy matrices for minimal Lagrangian surfaces in CP^2 (joint with Hui Ma), to appear in proceedings in honor of A.Leutbecher
61. Minimal Lagrangian surfaces in CP^2 via loop groups (joint with Hui Ma), to appear
62. Theta functions for tube domains (joint with S.Walcher), to appear