Luis J Alias

List of Publications by Year
in descending order

108 papers	1,832 citations

331670
21 h-index	

330143
37 g-index	

108 all docs	108 docs citations

108 times ranked	310 citing authors

#	Article	IF	Citations
1	Stability of mean curvature flow solitons in warped product spaces. Revista Matematica Complutense, 2022, 35, 287-309.	1.2	1
2	The principal curvature theorem and its applications to constant mean curvature hypersurfaces in Euclidean space. Matematica Contemporanea, 2022, 49, .	0.0	0
3	A maximum principle related to volume growth and applications. Annali Di Matematica Pura Ed Applicata, 2021, 200, 1637-1650.	1.0	13
4	Mean Curvature Flow Solitons in the Presence of Conformal Vector Fields. Journal of Geometric Analysis, 2020, 30, 1466-1529.	1.0	20
5	Integral Inequalities for Compact Hypersurfaces with Constant Scalar Curvature in the Euclidean Sphere. Mediterranean Journal of Mathematics, 2020, 17, 1.	0.8	9
6	Spacelike Hypersurfaces in Conformally Stationary Spacetimes. RSME Springer Series, 2020, , 161-174.	0.1	0
7	Codimension two spacelike submanifolds of the Lorentz-Minkowski spacetime into the light cone. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2019, 149, 1523-1553.	1.2	5
8	A maximum principle at infinity with applications to geometric vector fields. Journal of Mathematical Analysis and Applications, 2019, 474, 242-247.	1.0	22
9	A New Approach to Minimal and Maximal Hypersurfaces in Product Spaces. Results in Mathematics, 2019, 74, 1.	0.8	2
10	Remarks on hypersurfaces with constant higher order mean curvature in Euclidean space. Geometriae Dedicata, 2019, 199, 273-280.	0.3	6
11	Hypersurfaces with constant scalar curvature in space forms. Differential Geometry and Its Applications, 2018, 58, 65-82.	0.5	6
12	Characterizations of Spacelike Submanifolds with Constant Scalar Curvature in the de Sitter Space. Mediterranean Journal of Mathematics, 2018, 15, 1.	0.8	7
13	Trapped submanifolds contained into a null hypersurface of de Sitter spacetime. Communications in Contemporary Mathematics, 2018, 20, 1750059.	1.2	5
14	Marginally trapped submanifolds in generalized Robertsonâ€"Walker spacetimes. General Relativity and Gravitation, 2017, 49, 1.	2.0	7
15	On the scarcity of non-totally geodesic complete spacelike hypersurfaces of constant mean curvature in a Lie group with bi-invariant Lorentzian metric. Differential Geometry and Its Applications, 2017, 51, 49-64.	0.5	1
16	Rigidity of linear Weingarten hypersurfaces in locally symmetric manifolds. Mathematische Nachrichten, 2016, 289, 1309-1324.	0.8	7
17	Geometric analysis of the Lorentzian distance function on trapped submanifolds. Classical and Quantum Gravity, 2016, 33, 125007.	4.0	3
18	Hypersurfaces with constant higher order mean curvature in Euclidean space. Geometriae Dedicata, 2016, 182, 117-131.	0.3	8

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19	Miscellany Results for Submanifolds. Springer Monographs in Mathematics, 2016, , 271-324.	0.2	0
20	Applications to Hypersurfaces. Springer Monographs in Mathematics, 2016, , 325-383.	0.2	0
21	Hypersurfaces in Warped Products. Springer Monographs in Mathematics, 2016, , 385-441.	0.2	0
22	Spacelike Hypersurfaces in Lorentzian Spacetimes. Springer Monographs in Mathematics, 2016, , 499-552.	0.2	0
23	Maximum Principles and Geometric Applications. Springer Monographs in Mathematics, 2016, , .	0.2	94
24	A new open form of the weak maximum principle and geometric applications. Communications in Analysis and Geometry, 2016, 24, 1-43.	0.4	7
25	Weak maximum principles and geometric estimates for spacelike hypersurfaces in generalized Robertson–Walker spacetimes. Nonlinear Analysis: Theory, Methods & Applications, 2015, 129, 119-142.	1.1	6
26	Uniqueness of entire graphs in warped products. Journal of Mathematical Analysis and Applications, 2015, 430, 60-75.	1.0	11
27	On the First Stability Eigenvalue of Constant Mean Curvature Surfaces Into Homogeneous 3-Manifolds. Mediterranean Journal of Mathematics, 2015, 12, 147-158.	0.8	7
28	Hypersurfaces of constant higher order mean curvature in warped products. Transactions of the American Mathematical Society, 2013, 365, 591-621.	0.9	44
29	On the rigidity of complete spacelike hypersurfaces immersed in a generalized Robertson-Walker spacetime. Bulletin of the Brazilian Mathematical Society, 2013, 44, 195-217.	0.8	9
30	Existence and Topological Uniqueness of Compact CMC Hypersurfaces with Boundary in Hyperbolic Space. Journal of Geometric Analysis, 2013, 23, 2177-2187.	1.0	2
31	Bifurcation of Constant Mean Curvature Tori in Euclidean Spheres. Journal of Geometric Analysis, 2013, 23, 677-708.	1.0	12
32	Higher order mean curvature estimates for bounded complete hypersurfaces. Nonlinear Analysis: Theory, Methods & Applications, 2013, 84, 73-83.	1.1	10
33	Erratum to â€œSpacelike hypersurfaces of constant higher order mean curvature in generalized Robertsonâ€"Walker spacetimesâ€‐ Math. Proc. Camb. Phil. Soc. (2012), 152, 365â€"383.. Mathematical Proceedings of the Cambridge Philosophical Society, 2013, 155, 375-377.	0.4	2
34	Biharmonic hypersurfaces in complete Riemannian manifolds. Pacific Journal of Mathematics, 2013, 263, 1-12.	0.5	14
35	A general form of the weak maximum principle and some applications. Revista Matematica Iberoamericana, 2013, 29, 1437-1476.	0.9	15
36	An estimate for the sectional curvature of cylindrically bounded submanifolds. Transactions of the American Mathematical Society, 2012, 364, 3513-3528.	0.9	9

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37	Spacelike hypersurfaces of constant higher order mean curvature in generalized Robertson–Walker spacetimes. Mathematical Proceedings of the Cambridge Philosophical Society, 2012, 152, 365-383.	0.4	32
38	Generalized Weierstrass representation for surfaces in Heisenberg spaces. Differential Geometry and Its Applications, 2012, 30, 1-12.	0.5	0
39	An estimate for the scalar curvature of constant mean curvature hypersurfaces in space forms. Geometriae Dedicata, 2012, 156, 31-47.	0.3	12
40	A maximum principle for hypersurfaces with constant scalar curvature and applications. Annals of Global Analysis and Geometry, 2012, 41, 307-320.	0.6	31
41	Calabi–Bernstein Results and Parabolicity of Maximal Surfaces in Lorentzian Product Spaces. Springer Proceedings in Mathematics and Statistics, 2012, , 49-85.	0.2	0
42	On the manifold structure of the set of unparameterized embeddings with low regularity. Bulletin of the Brazilian Mathematical Society, 2011, 42, 171-183.	0.8	7
43	Curvature Estimates for Submanifolds in Warped Products. Results in Mathematics, 2011, 60, 265-286.	0.8	3
44	Parabolicity of maximal surfaces in Lorentzian product spaces. Mathematische Zeitschrift, 2011, 267, 453-464.	0.9	15
45	HYPERSURFACES IN SPACE FORMS SATISFYING THE CONDITION $L_k x = Ax + b$. Taiwanese Journal of Mathematics, 2010, 14, .	0.4	8
46	On the scalar curvature of constant mean curvature hypersurfaces in space forms. Journal of Mathematical Analysis and Applications, 2010, 363, 579-587.	1.0	28
47	On the scalar curvature of hypersurfaces in spaces with a Killing field. Advances in Geometry, 2010, 10, 487-503.	0.4	4
48	Geometric analysis of Lorentzian distance function on spacelike hypersurfaces. Transactions of the American Mathematical Society, 2010, 362, 5083-5083.	0.9	8
49	Comparison theory of Lorentzian distance with applications to spacelike hypersurfaces. , 2009, , .		7
50	A Hilbert-type theorem for spacelike surfaces with constant Gaussian curvature in $\mathbb{L}^2 \times \mathbb{H}^1$. Bulletin of the Brazilian Mathematical Society, 2009, 40, 465-478.	0.8	3
51	The mean curvature of cylindrically bounded submanifolds. Mathematische Annalen, 2009, 345, 367-376.	1.4	25
52	Calabi–Bernstein results for maximal surfaces in Lorentzian product spaces. Journal of Geometry and Physics, 2009, 59, 620-631.	1.4	47
53	Constant mean curvature graphs in a class of warped product spaces. Geometriae Dedicata, 2008, 131, 173-179.	0.3	7
54	A Characterization of Quadric Constant Mean Curvature Hypersurfaces of Spheres. Journal of Geometric Analysis, 2008, 18, 687.	1.0	12

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55	Spacelike hypersurfaces with constant mean curvature in the steady state space. Proceedings of the American Mathematical Society, 2008, 137, 711-721.	0.8	32
56	A local estimate for maximal surfaces in Lorentzian product spaces. Matematica Contemporanea, 2008, 34, .	0.0	0
57	CONSTANT MEAN CURVATURE HYPERSURFACES IN WARPED PRODUCT SPACES. Proceedings of the Edinburgh Mathematical Society, 2007, 50, 511-526.	0.3	45
58	Uniqueness of spacelike hypersurfaces with constant higher order mean curvature in generalized Robertsonâ€"Walker spacetimes. Mathematical Proceedings of the Cambridge Philosophical Society, 2007, 143, 703-729.	0.4	80
59	An extension of Takahashi theorem for the linearized operators of the higher order mean curvatures. Geometriae Dedicata, 2007, 121, 113-127.	0.3	48
60	A Bernstein-type theorem for Riemannian manifolds with a Killing field. Annals of Global Analysis and Geometry, 2007, 31, 363-373.	0.6	40
61	The Dirichlet problem for constant mean curvature surfaces in Heisenberg space. Calculus of Variations and Partial Differential Equations, 2007, 30, 513-522.	1.7	9
62	On the stability index of hypersurfaces with constant mean curvature in spheres. Proceedings of the American Mathematical Society, 2007, 135, 3685-3694.	0.8	15
63	Hadamard-type theorems for hypersurfaces in hyperbolic spaces. Differential Geometry and Its Applications, 2006, 24, 492-502.	0.5	13
64	Stable constant mean curvature hypersurfaces in the real projective space. Manuscripta Mathematica, 2006, 121, 329-338.	0.6	3
65	CONSTANT HIGHER-ORDER MEAN CURVATURE HYPERSURFACES IN RIEMANNIAN SPACES. Journal of the Institute of Mathematics of Jussieu, 2006, 5, 527.	0.7	44
66	A Further Characterization Of Ellipsoids. Resultate Der Mathematik, 2005, 48, 1-8.	0.2	1
67	A New Proof of Liebmann Classical Rigidity Theorem for Surfaces in Space Forms. Rocky Mountain Journal of Mathematics, 2005, 35, .	0.4	15
68	Hypersurfaces with constant mean curvature and two principal curvatures in <img id="_x0000_i1025" src="../../../../img/revistas/aabc/v76n3/a03img01.gif" align=absbottom>n+1. Anais Da Academia Brasileira De Ciencias, 2004, 76, 489-497.	0.8	10
69	A characterization of Clifford tori with constant scalar curvature one by the first stability eigenvalue. Bulletin of the Brazilian Mathematical Society, 2004, 35, 165-175.	0.8	4
70	A spectral characterization of the $H(r)$-torus by the first stability eigenvalue. Proceedings of the American Mathematical Society, 2004, 133, 875-884.	0.8	19
71	On the first eigenvalue of the linearized operator of the higher order mean curvature for closed hypersurfaces in space forms. Illinois Journal of Mathematics, 2004, 48, .	0.1	18
72	BjÃ¶rling problem for maximal surfaces in Lorentzâ€"Minkowski space. Mathematical Proceedings of the Cambridge Philosophical Society, 2003, 134, 289-316.	0.4	43

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73	INTEGRAL FORMULAE FOR SPACELIKE HYPERSURFACES IN CONFORMALLY STATIONARY SPACETIMES AND APPLICATIONS. Proceedings of the Edinburgh Mathematical Society, 2003, 46, 465-488.	0.3	64
74	An integral formula for compact hypersurfaces in space forms and its applications. Journal of the Australian Mathematical Society, 2003, 74, 239-248.	0.4	1
75	HYPERSURFACES WITH CONSTANT HIGHER ORDER MEAN CURVATURE IN EUCLIDEAN SPACE. , 2002, , .		0
76	A Schwarz-type formula for minimal surfaces in Euclidean space. Comptes Rendus Mathematique, 2002, 334, 389-394.	0.3	8
77	Spacelike hypersurfaces with constant higher order mean curvature in Minkowski space–time. Journal of Geometry and Physics, 2002, 41, 359-375.	1.4	9
78	Addendum to "Spacelike hypersurfaces with constant higher order mean curvature in the Minkowski space–time" Journal of Geometry and Physics, 2002, 41, 376-379.	1.4	1
79	On the volume and the Gauss map image of spacelike hypersurfaces in de Sitter space. Proceedings of the American Mathematical Society, 2002, 130, 1145-1151.	0.8	15
80	UNIQUENESS OF SPACELIKE HYPERSURFACES WITH CONSTANT MEAN CURVATURE IN GENERALIZED ROBERTSON-WALKER SPACETIMES. , 2002, , .		10
81	A duality result between the minimal surface equation and the maximal surface equation. Anais Da Academia Brasileira De Ciencias, 2001, 73, 161-164.	0.8	18
82	On the area of constant mean curvature discs and annuli with circular boundaries. Mathematische Zeitschrift, 2001, 237, 585-599.	0.9	1
83	Remarks on compact spacelike hypersurfaces in de Sitter space with constant higher order mean curvature. Journal of Geometry and Physics, 2001, 39, 46-50.	1.4	4
84	Curvature properties of compact spacelike hypersurfaces in de Sitter space. Differential Geometry and Its Applications, 2001, 14, 137-149.	0.5	5
85	ON THE GAUSSIAN CURVATURE OF MAXIMAL SURFACES AND THE CALABI–BERNSTEIN THEOREM. Bulletin of the London Mathematical Society, 2001, 33, 454-458.	0.8	34
86	On the Curvatures of Complete Spacelike Hypersurfaces in de Sitter Space. Geometriae Dedicata, 2000, 80, 51-58.	0.3	5
87	Spacelike Hypersurfaces with Constant Scalar Curvature in the Lorentz–Minkowski Space. Annals of Global Analysis and Geometry, 2000, 18, 75-84.	0.6	5
88	On the curvatures of bounded complete spacelike hypersurfaces in the Lorentz-Minkowski space. Manuscripta Mathematica, 2000, 101, 401-413.	0.6	24
89	Stable constant mean curvature surfaces with circular boundary. Proceedings of the American Mathematical Society, 1999, 127, 1195-1200.	0.8	20
90	Spacelike surfaces of constant mean curvature with free boundary in the Minkowski space. Classical and Quantum Gravity, 1999, 16, 1323-1331.	4.0	10

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91	Integral formulas for compact space-like hypersurfaces in de Sitter space: Applications to the case of constant higher order mean curvature. Journal of Geometry and Physics, 1999, 31, 195-208.	1.4	39
92	On the Ricci Curvature of Compact Spacelike Hypersurfaces in de Sitter Space. Geometriae Dedicata, 1999, 77, 297-304.	0.3	6
93	Zero mean curvature surfaces with non‐negative curvature in flat Lorentzian 4‐spaces. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1999, 455, 631-636.	2.1	16
94	Constant mean curvature spacelike hypersurfaces with spherical boundary in the Lorentz-Minkowski space. Journal of Geometry and Physics, 1998, 28, 85-93.	1.4	21
95	Compact spacelike surfaces with constant mean curvature in the Lorentz-Minkowski 3-space. Tohoku Mathematical Journal, 1998, 50, 491.	0.2	14
96	Curvature properties of zero mean curvature surfaces in four-dimensional Lorentzian space forms. Mathematical Proceedings of the Cambridge Philosophical Society, 1998, 124, 315-327.	0.4	16
97	Deformations of stationary surfaces. Classical and Quantum Gravity, 1997, 14, 2107-2111.	4.0	11
98	Spacelike submanifolds with parallel mean curvature in pseudo-Riemannian space forms. Tsukuba Journal of Mathematics, 1997, 21, 169.	0.1	12
99	Clay minerals and soil fertility loss on Petric Calcisol under a semiarid Mediterranean environment. Soil and Tillage Research, 1997, 10, 9-19.	0.4	11
100	Spacelike hypersurfaces of constant mean curvature and Calabi-Bernstein type problems. Tohoku Mathematical Journal, 1997, 49, 337.	0.2	63
101	Spacelike hypersurfaces of constant mean curvature in certain spacetimes. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 655-661.	1.1	44
102	On the Gaussian curvature of maximal surfaces in n -dimensional generalized Robertson - Walker spacetimes. Classical and Quantum Gravity, 1996, 13, 3211-3219.	4.0	14
103	Integral formulas for compact spacelike n-submanifolds in de Sitter spaces applications to the parallel mean curvature vector case. Manuscripta Mathematica, 1995, 87, 405-416.	0.6	23
104	Uniqueness of complete spacelike hypersurfaces of constant mean curvature in generalized Robertson-Walker spacetimes. General Relativity and Gravitation, 1995, 27, 71-84.	2.0	223
105	An integral inequality for compact maximal surfaces in n-dimensional de Sitter space and its applications. Annals of Global Analysis and Geometry, 1995, 13, 3-8.	0.6	3
106	Hypersurfaces in space forms satisfying the condition Î”?=??+?. Transactions of the American Mathematical Society, 1995, 347, 1793-1801.	0.9	7
107	Hypersurfaces in Space Forms Satisfying the Condition Î”x = Ax + B. Transactions of the American Mathematical Society, 1995, 347, 1793.	0.9	5
108	Submanifolds in pseudo-Euclidean spaces satisfying the condition Î”x=Ax+B. Geometriae Dedicata, 1992, 42, 345-354.	0.3	18