

Hennie De Schepper

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8956490/publications.pdf>

Version: 2024-02-01

96
papers

982
citations

567281

15
h-index

501196

28
g-index

98
all docs

98
docs citations

98
times ranked

224
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical modelling of convection dominated transport coupled with density driven flow in porous media. <i>Advances in Water Resources</i> , 2000, 24, 63-72.	3.8	90
2	Fundamentals of Hermitean Clifford Analysis Part I: Complex Structure. <i>Complex Analysis and Operator Theory</i> , 2007, 1, 341-365.	0.6	86
3	Fundamentals of Hermitean Clifford analysis part II: splitting ofh-monogenic equations. <i>Complex Variables and Elliptic Equations</i> , 2007, 52, 1063-1079.	0.8	79
4	The Hermitian Clifford Analysis Toolbox. <i>Advances in Applied Clifford Algebras</i> , 2008, 18, 451-487.	1.0	78
5	The Howe dual pair in Hermitean Clifford analysis. <i>Revista Matematica Iberoamericana</i> , 2010, 26, 449-479.	0.9	47
6	A matrix Hilbert transform in Hermitean Clifford analysis. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 344, 1068-1078.	1.0	35
7	On Cauchy and Martinelli-Bochner integral formulae in Hermitean Clifford analysis. <i>Bulletin of the Brazilian Mathematical Society</i> , 2009, 40, 395-416.	0.8	34
8	Discrete function theory based on skew Weyl relations. <i>Proceedings of the American Mathematical Society</i> , 2010, 138, 3241-3241.	0.8	31
9	On the interplay between the Hilbert transform and conjugate harmonic functions. <i>Mathematical Methods in the Applied Sciences</i> , 2006, 29, 1435-1450.	2.3	30
10	Cauchy Integral Formulae in Quaternionic Hermitean Clifford Analysis. <i>Complex Analysis and Operator Theory</i> , 2012, 6, 971-985.	0.6	24
11	Generalized multidimensional Hilbert transforms in Clifford analysis. <i>International Journal of Mathematics and Mathematical Sciences</i> , 2006, 2006, 1-19.	0.7	20
12	The Cauchy-Kovalevskaya extension theorem in Hermitian Clifford analysis. <i>Journal of Mathematical Analysis and Applications</i> , 2011, 381, 649-660.	1.0	20
13	A theoretical framework for wavelet analysis in a Hermitean Clifford setting. <i>Communications on Pure and Applied Analysis</i> , 2007, 6, 549-567.	0.8	20
14	Determination of the heat-transfer coefficient during solidification of alloys. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2005, 194, 491-498.	6.6	17
15	HILBERT-DIRAC OPERATORS IN CLIFFORD ANALYSIS. <i>Chinese Annals of Mathematics Series B</i> , 2005, 26, 1-14.	0.4	17
16	Boundary value problems associated to a Hermitian Helmholtz equation. <i>Journal of Mathematical Analysis and Applications</i> , 2012, 389, 1268-1279.	1.0	16
17	A Basic Framework for Discrete Clifford Analysis. <i>Experimental Mathematics</i> , 2009, 18, 385-395.	0.7	15
18	A new Hilbert transform on the unit sphere in. <i>Complex Variables and Elliptic Equations</i> , 2006, 51, 453-462.	0.8	14

#	ARTICLE	IF	CITATIONS
19	On a special type of solutions of arbitrary higher spin Dirac operators. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 325208.	2.1	14
20	Gel'fand-Tsetlin bases of orthogonal polynomials in Hermitean Clifford analysis. Mathematical Methods in the Applied Sciences, 2011, 34, 2167-2180.	2.3	14
21	Fueter polynomials in discrete Clifford analysis. Mathematische Zeitschrift, 2012, 272, 253-268.	0.9	14
22	A Hermitian Cauchy formula on a domain with fractal boundary. Journal of Mathematical Analysis and Applications, 2010, 369, 273-282.	1.0	13
23	Conjugate Harmonic Functions in Euclidean Space: a Spherical Approach. Computational Methods and Function Theory, 2006, 6, 165-182.	1.5	11
24	Hermitean Clifford-Hermite Polynomials. Advances in Applied Clifford Algebras, 2007, 17, 311-330.	1.0	11
25	On an inverse problem of pressure recovery arising from soil venting facilities. Applied Mathematics and Computation, 2002, 129, 469-480.	2.2	10
26	Higher order Borel-Pompeiu representations in Clifford analysis. Mathematical Methods in the Applied Sciences, 2016, 39, 4787-4796.	2.3	10
27	Fischer Decompositions of Kernels of Hermitean Dirac Operators. , 2010, , .		9
28	Orthogonal Bases of Hermitean Monogenic Polynomials: An Explicit Construction in Complex Dimension 2. , 2010, , .		9
29	Gel'fand-Tsetlin Procedure for the Construction of Orthogonal Bases in Hermitean Clifford Analysis. , 2010, , .		9
30	Matrix Cauchy and Hilbert transforms in Hermitian quaternionic Clifford analysis. Complex Variables and Elliptic Equations, 2013, 58, 1057-1069.	0.8	9
31	Taylor Series Expansion in Discrete Clifford Analysis. Complex Analysis and Operator Theory, 2014, 8, 485-511.	0.6	9
32	A Hilbert Transform for Matrix Functions on Fractal Domains. Complex Analysis and Operator Theory, 2012, 6, 359-372.	0.6	8
33	A Calculus Scheme for Clifford Distributions. Tokyo Journal of Mathematics, 2006, 29, .	0.1	8
34	Generalized Hermitean Clifford-Hermite polynomials and the associated wavelet transform. Mathematical Methods in the Applied Sciences, 2009, 32, 606-630.	2.3	7
35	Fundamentals of Quaternionic Clifford Analysis I: Quaternionic Structure. Advances in Applied Clifford Algebras, 2014, 24, 955-980.	1.0	7
36	On the Fourier Spectra of Distributions in Clifford Analysis. Chinese Annals of Mathematics Series B, 2006, 27, 495-506.	0.4	6

#	ARTICLE	IF	CITATIONS
37	Fischer decomposition in symplectic harmonic analysis. <i>Annals of Global Analysis and Geometry</i> , 2014, 46, 409-430.	0.6	6
38	Twisted Higher Spin Dirac Operators. <i>Complex Analysis and Operator Theory</i> , 2014, 8, 429-447.	0.6	6
39	On a finite element method for second order elliptic eigenvalue problems with nonlocal Dirichlet boundary conditions. <i>Numerical Functional Analysis and Optimization</i> , 1997, 18, 283-295.	1.4	5
40	Boundary value problems for the quaternionic Hermitian system in "Equation missing" <!-- No EquationSource Format="TEX", only image and EquationSource Format="MATHML" -->. <i>Boundary Value Problems</i> , 2012, 2012, .	0.7	5
41	Fischer decomposition for \mathbb{H} -monogenics in quaternionic Clifford analysis. <i>Mathematical Methods in the Applied Sciences</i> , 2016, 39, 4874-4891.	2.3	5
42	The Radial Algebra as an Abstract Framework for Orthogonal and Hermitian Clifford Analysis. <i>Complex Analysis and Operator Theory</i> , 2017, 11, 1139-1172.	0.6	5
43	Spin actions in Euclidean and Hermitian Clifford analysis in superspace. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 457, 23-50.	1.0	5
44	On a variational approximation method for 2nd order eigenvalue problems in a multi-component domain with nonlocal Dirichlet transition conditions. <i>Numerical Functional Analysis and Optimization</i> , 1998, 19, 971-993.	1.4	4
45	A finite element method for differential eigenvalue problems with mixed classical and (semi-)periodic boundary conditions. <i>Applied Mathematics and Computation</i> , 2001, 121, 1-15.	2.2	4
46	Multi-vector Spherical Monogenics, Spherical Means and Distributions in Clifford Analysis. <i>Acta Mathematica Sinica, English Series</i> , 2005, 21, 1197-1208.	0.6	4
47	Differential Forms in Hermitean Clifford Analysis. , 2008, , .		4
48	Hardy spaces of solutions of generalized Riesz and Moisil-Teodorescu systems. <i>Complex Variables and Elliptic Equations</i> , 2012, 57, 771-785.	0.8	4
49	A finite element method for elliptic eigenvalue problems in a multi-component domain in 2D with non-local Dirichlet transition conditions. <i>Journal of Computational and Applied Mathematics</i> , 1999, 111, 253-265.	2.0	3
50	Finite element analysis of a coupling eigenvalue problem on overlapping domains. <i>Journal of Computational and Applied Mathematics</i> , 2001, 132, 141-153.	2.0	3
51	On the Fourier transform of distributions and differential operators in Clifford analysis. <i>Complex Variables and Elliptic Equations</i> , 2004, 49, 1079-1091.	0.2	3
52	Convolution kernels in Clifford analysis: old and new. <i>Mathematical Methods in the Applied Sciences</i> , 2005, 28, 2173-2182.	2.3	3
53	On generalized Hilbert transforms and their interaction with the Radon transform in Clifford analysis. <i>Mathematical Methods in the Applied Sciences</i> , 2007, 30, 1071-1092.	2.3	3
54	Orthogonality of the generalized Hermitean Clifford-Hermite polynomials. <i>Integral Transforms and Special Functions</i> , 2008, 19, 687-707.	1.2	3

#	ARTICLE	IF	CITATIONS
55	Differential forms versus multi-vector functions in Hermitean Clifford analysis. <i>Cubo</i> , 2011, 13, 85-117.	0.5	3
56	On the Structure of Complex Clifford Algebra. <i>Advances in Applied Clifford Algebras</i> , 2011, 21, 477-492.	1.0	3
57	Hölder norm estimate for a Hilbert transform in Hermitean Clifford analysis. <i>Acta Mathematica Sinica, English Series</i> , 2012, 28, 2289-2300.	0.6	3
58	The Teodorescu operator in Clifford analysis. <i>Chinese Annals of Mathematics Series B</i> , 2012, 33, 625-640.	0.4	3
59	Embedding Factors for Branching in Hermitian Clifford Analysis. <i>Complex Analysis and Operator Theory</i> , 2015, 9, 355-378.	0.6	3
60	Hermitian Clifford Analysis on Superspace. <i>Advances in Applied Clifford Algebras</i> , 2018, 28, 1.	1.0	3
61	Introductory Clifford Analysis. , 2014, , 1-27.		3
62	Hilbert Transforms in Clifford Analysis. , 2010, , 163-187.		2
63	Explicit Penrose Transform for Massless Field Equations of General Spin in Dimension Four. , 2011, , .		2
64	Selfdual 2-forms in dimension 4 and their Fischer decomposition. , 2012, , .		2
65	Branching of monogenic polynomials. , 2012, , .		2
66	On Fundamental Solutions in Clifford Analysis. <i>Complex Analysis and Operator Theory</i> , 2012, 6, 325-339.	0.6	2
67	Dirichlet type problems in Hermitian Clifford analysis. <i>Journal of Mathematical Analysis and Applications</i> , 2014, 417, 439-450.	1.0	2
68	On a Chain of Harmonic and Monogenic Potentials in Euclidean Half-space. <i>Potential Analysis</i> , 2014, 41, 613-645.	0.9	2
69	Harmonic and monogenic potentials in low dimensional Euclidean half-space. <i>Mathematical Methods in the Applied Sciences</i> , 2014, 37, 2065-2079.	2.3	2
70	Introductory Clifford Analysis. , 2015, , 1339-1367.		2
71	Fundamentals of quaternionic Clifford analysis II: splitting of equations. <i>Complex Variables and Elliptic Equations</i> , 2017, 62, 616-641.	0.8	2
72	Fischer Decomposition for Massless Fields of Spin 1 in Dimension 4. <i>Complex Analysis and Operator Theory</i> , 2018, 12, 439-456.	0.6	2

#	ARTICLE	IF	CITATIONS
73	Distributional Boundary Values of Harmonic Potentials in Euclidean Half-Space as Fundamental Solutions of Convolution Operators in Clifford Analysis. Springer INdAM Series, 2013, , 15-37.	0.5	2
74	Finite element approximation for 2nd order elliptic eigenvalue problems with nonlocal boundary or transition conditions. Applied Mathematics and Computation, 1997, 82, 1-16.	2.2	1
75	A variational approximation method for 2nd order elliptic eigenvalue problems in a composite structure with nonstandard boundary conditions. Computing (Vienna/New York), 1998, 60, 55-72.	4.8	1
76	Finite Element Methods for Eigenvalue Problems on a Rectangle with (Semi-) Periodic Boundary Conditions on a Pair of Adjacent Sides. Computing (Vienna/New York), 2000, 64, 191-206.	4.8	1
77	A nonlinear boundary value problem containing nonstandard boundary conditions. Applied Mathematics and Computation, 2002, 132, 559-574.	2.2	1
78	Finite Element Approximation of a Contact Vector Eigenvalue Problem. Applications of Mathematics, 2003, 48, 559-571.	0.9	1
79	Finite Element Approximation of a 2D-1D Contact Eigenvalue Problem. Numerical Functional Analysis and Optimization, 2005, 25, 349-362.	1.4	1
80	Two-index Clifford-Hermite polynomials with applications in wavelet analysis. Journal of Mathematical Analysis and Applications, 2008, 341, 120-130.	1.0	1
81	Explicit Formulae for Monogenic Projections. , 2008, , .		1
82	Harmonic and Monogenic Potentials in Euclidean Halfspace. , 2011, , .		1
83	Boundary Value Problems on Fractal Hypersurfaces for the Quaternionic Hermitian System in \mathbb{R}^{4n} . Complex Analysis and Operator Theory, 2015, 9, 957-973.	0.6	1
84	On a Mixed Fischer Decomposition in Clifford Analysis. Complex Analysis and Operator Theory, 2017, 11, 359-374.	0.6	1
85	On the numerical approximation of some types of nonstandard second-order eigenvalue problems for vector valued functions. Journal of Computational and Applied Mathematics, 2000, 115, 151-167.	2.0	0
86	The l.s.c. regularization of the Signorini problem in plasticity. Mathematical Methods in the Applied Sciences, 2002, 25, 709-727.	2.3	0
87	The generalized Hermitean Clifford-Hermite continuous wavelet transform. AIP Conference Proceedings, 2007, , .	0.4	0
88	Explicit Formulae for the Hermitean Monogenic Projection Operator. , 2008, , .		0
89	The Hermitean Hilbert-Dirac Connection. Advances in Applied Clifford Algebras, 2009, 19, 211-224.	1.0	0
90	A Goursat Decomposition for Polyharmonic Functions in Euclidean Space. Advances in Applied Clifford Algebras, 2012, 22, 563-575.	1.0	0

#	ARTICLE	IF	CITATIONS
91	On Primitives and Conjugate Harmonic Pairs in Hermitian Clifford Analysis. Complex Analysis and Operator Theory, 2013, 7, 1583-1607.	0.6	0
92	Representation of Distributions by Harmonic and Monogenic Potentials in Euclidean Space. Advances in Applied Clifford Algebras, 2015, 25, 31-52.	1.0	0
93	Generalized Taylor series in hermitian Clifford analysis. Journal of Mathematical Analysis and Applications, 2015, 421, 1531-1545.	1.0	0
94	Fischer decomposition for the symplectic group. Journal of Mathematical Analysis and Applications, 2018, 458, 831-848.	1.0	0
95	The Cauchy Integral Formula in Hermitian, Quaternionic and $\mathfrak{osp}(4 2)$ Clifford Analysis. Computational Methods and Function Theory, 2020, 20, 431-464.	1.5	0
96	Fischer Decomposition of Massless Fields for $\text{Spin}\hat{3}/2$ in Dimension 4. Advances in Applied Clifford Algebras, 2022, 32, 1.	1.0	0