Hennie De Schepper

List of Publications by Year
in descending order

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	Fischer Decomposition of Massless Fields for SpinÂ3/2 in Dimension 4. Advances in Applied Clifford Algebras, 2022, 32, 1.	1.0	0
2	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
3	Hermitian Clifford Analysis on Superspace. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	3
4	Fischer Decomposition for Massless Fields of Spin 1 in Dimension 4. Complex Analysis and Operator Theory, 2018, 12, 439-456.	0.6	2
5	Fischer decomposition for the symplectic group. Journal of Mathematical Analysis and Applications, 2018, 458, 831-848.	1.0	0
6	Spin actions in Euclidean and Hermitian Clifford analysis in superspace. Journal of Mathematical Analysis and Applications, 2018, 457, 23-50.	1.0	5
7	On a Mixed Fischer Decomposition in Clifford Analysis. Complex Analysis and Operator Theory, 2017, 11, 359-374.	0.6	1
8	The Radial Algebra as an Abstract Framework for Orthogonal and Hermitian Clifford Analysis. Complex Analysis and Operator Theory, 2017, 11, 1139-1172.	0.6	5
9	Fundaments of quaternionic Clifford analysis II: splitting of equations. Complex Variables and Elliptic Equations, 2017, 62, 616-641.	0.8	2
10	Higher order Borelâ€"Pompeiu representations in Clifford analysis. Mathematical Methods in the Applied Sciences, 2016, 39, 4787-4796.	2.3	10
11	Fischer decomposition for â€monogenics in quaternionic Clifford analysis. Mathematical Methods in the Applied Sciences, 2016, 39, 4874-4891.	2.3	5
12	Representation of Distributions by Harmonic and Monogenic Potentials in Euclidean Space. Advances in Applied Clifford Algebras, 2015, 25, 31-52.	1.0	0
13	Introductory Clifford Analysis. , 2015, , 1339-1367.		2
14	Boundary Value Problems on Fractal Hypersurfaces for the Quaternionic Hermitian System in $$\mathbb {R}^{4n}$$ R 4 n. Complex Analysis and Operator Theory, 2015, 9, 957-973.	0.6	1
15	Embedding Factors for Branching in Hermitian Clifford Analysis. Complex Analysis and Operator Theory, 2015, 9, 355-378.	0.6	3
16	Generalized Taylor series in hermitian Clifford analysis. Journal of Mathematical Analysis and Applications, 2015, 421, 1531-1545.	1.0	0
17	Fischer decomposition in symplectic harmonic analysis. Annals of Global Analysis and Geometry, 2014, 46, 409-430.	0.6	6
18	Fundaments of Quaternionic Clifford Analysis I: Quaternionic Structure. Advances in Applied Clifford Algebras, 2014, 24, 955-980.	1.0	7

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19	Dirichlet type problems in Hermitian Clifford analysis. Journal of Mathematical Analysis and Applications, 2014, 417, 439-450.	1.0	2
20	Taylor Series Expansion in Discrete Clifford Analysis. Complex Analysis and Operator Theory, 2014, 8, 485-511.	0.6	9
21	Twisted Higher Spin Dirac Operators. Complex Analysis and Operator Theory, 2014, 8, 429-447.	0.6	6
22	On a Chain of Harmonic and Monogenic Potentials in Euclidean Half–space. Potential Analysis, 2014, 41, 613-645.	0.9	2
23	Harmonic and monogenic potentials in low dimensional Euclidean half-space. Mathematical Methods in the Applied Sciences, 2014, 37, 2065-2079.	2.3	2
24	Introductory Clifford Analysis. , 2014, , 1-27.		3
25	On Primitives and Conjugate Harmonic Pairs in Hermitian Clifford Analysis. Complex Analysis and Operator Theory, 2013, 7, 1583-1607.	0.6	0
26	Matrix Cauchy and Hilbert transforms in Hermitian quaternionic Clifford analysis. Complex Variables and Elliptic Equations, 2013, 58, 1057-1069.	0.8	9
27	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
28	Selfdual 2-forms in dimension 4 and their Fischer decomposition. , 2012, , .		2
29	Branching of monogenic polynomials. , 2012, , .		2
30	Hardy spaces of solutions of generalized Riesz and Moisil–Teodorescu systems. Complex Variables and Elliptic Equations, 2012, 57, 771-785.	0.8	4
31	Fueter polynomials in discrete Clifford analysis. Mathematische Zeitschrift, 2012, 272, 253-268.	0.9	14
32	Hölder norm estimate for a Hilbert transform in Hermitean Clifford analysis. Acta Mathematica Sinica, English Series, 2012, 28, 2289-2300.	0.6	3
33	Boundary value problems for the quaternionic Hermitian system in "Equation missing" <!-- No EquationSource Format="TEX", only image and EquationSource Format="MATHML" -->. Boundary Value Problems, 2012, 2012, .	0.7	5
34	Cauchy Integral Formulae in Quaternionic Hermitean Clifford Analysis. Complex Analysis and Operator Theory, 2012, 6, 971-985.	0.6	24
35	A Goursat Decomposition for Polyharmonic Functions in Euclidean Space. Advances in Applied Clifford Algebras, 2012, 22, 563-575.	1.0	0
36	The Teodorescu operator in Clifford analysis. Chinese Annals of Mathematics Series B, 2012, 33, 625-640.	0.4	3

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37	On Fundamental Solutions in Clifford Analysis. Complex Analysis and Operator Theory, 2012, 6, 325-339.	0.6	2
38	A Hilbert Transform for Matrix Functions on Fractal Domains. Complex Analysis and Operator Theory, 2012, 6, 359-372.	0.6	8
39	Boundary value problems associated to a Hermitian Helmholtz equation. Journal of Mathematical Analysis and Applications, 2012, 389, 1268-1279.	1.0	16
40	Differential forms versus multi-vector functions in Hermitean Clifford analysis. Cubo, 2011, 13, 85-117.	0.5	3
41	Harmonic and Monogenic Potentials in Euclidean Halfspace. , 2011, , .		1
42	Explicit Penrose Transform for Massless Field Equations of General Spin in Dimension Four. , 2011, , .		2
43	On the Structure of Complex Clifford Algebra. Advances in Applied Clifford Algebras, 2011, 21, 477-492.	1.0	3
44	Gel'fand-Tsetlin bases of orthogonal polynomials in Hermitean Clifford analysis. Mathematical Methods in the Applied Sciences, 2011, 34, 2167-2180.	2.3	14
45	The Cauchyâ€"Kovalevskaya extension theorem in Hermitian Clifford analysis. Journal of Mathematical Analysis and Applications, 2011, 381, 649-660.	1.0	20
46	Discrete function theory based on skew Weyl relations. Proceedings of the American Mathematical Society, 2010, 138, 3241-3241.	0.8	31
47	A Hermitian Cauchy formula on a domain with fractal boundary. Journal of Mathematical Analysis and Applications, 2010, 369, 273-282.	1.0	13
48	The Howe dual pair in Hermitean Clifford analysis. Revista Matematica Iberoamericana, 2010, 26, 449-479.	0.9	47
49	Fischer Decompositions of Kernels of Hermitean Dirac Operators. , 2010, , .		9
50	Orthogonal Bases of Hermitean Monogenic Polynomials: An Explicit Construction in Complex Dimension 2. , 2010, , .		9
51	Gelâ€™fand-Tsetlin Procedure for the Construction of Orthogonal Bases in Hermitean Clifford Analysis. , 2010, , .		9
52	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
53	Hilbert Transforms in Clifford Analysis. , 2010, , 163-187.		2
54	Generalized Hermitean Cliffordâ€"Hermite polynomials and the associated wavelet transform. Mathematical Methods in the Applied Sciences, 2009, 32, 606-630.	2.3	7

#	ARTICLE	IF	CITATIONS
55	On Cauchy and Martinelli-Bochner integral formulae in Hermitean Clifford analysis. Bulletin of the Brazilian Mathematical Society, 2009, 40, 395-416.	0.8	34
56	The Hermitean Hilbertâ€"Dirac Connection. Advances in Applied Clifford Algebras, 2009, 19, 211-224.	1.0	0
57	A Basic Framework for Discrete Clifford Analysis. Experimental Mathematics, 2009, 18, 385-395.	0.7	15
58	The Hermitian Clifford Analysis Toolbox. Advances in Applied Clifford Algebras, 2008, 18, 451-487.	1.0	78
59	Two-index Cliffordâ€"Hermite polynomials with applications in wavelet analysis. Journal of Mathematical Analysis and Applications, 2008, 341, 120-130.	1.0	1
60	A matrix Hilbert transform in Hermitean Clifford analysis. Journal of Mathematical Analysis and Applications, 2008, 344, 1068-1078.	1.0	35
61	Orthogonality of the generalized Hermitean Cliffordâ€"Hermite polynomials. Integral Transforms and Special Functions, 2008, 19, 687-707.	1.2	3
62	Differential Forms in Hermitean Clifford Analysis. , 2008, , .		4
63	Explicit Formulae for Monogenic Projections. , 2008, , .		1
64	Explicit Formulae for the Hermitean Monogenic Projection Operator. , 2008, , .		0
65	The generalized Hermitean Clifford-Hermite continuous wavelet transform. AIP Conference Proceedings, 2007, , .	0.4	0
66	Fundaments of Hermitean Clifford analysis part II: splitting ofh-monogenic equations. Complex Variables and Elliptic Equations, 2007, 52, 1063-1079.	0.8	79
67	On generalized Hilbert transforms and their interaction with the Radon transform in Clifford analysis. Mathematical Methods in the Applied Sciences, 2007, 30, 1071-1092.	2.3	3
68	Hermitean Clifford-Hermite Polynomials. Advances in Applied Clifford Algebras, 2007, 17, 311-330.	1.0	11
69	Fundaments of Hermitean Clifford Analysis Part I: Complex Structure. Complex Analysis and Operator Theory, 2007, 1, 341-365.	0.6	86
70	A theoretical framework for wavelet analysis in a Hermitean Clifford setting. Communications on Pure and Applied Analysis, 2007, 6, 549-567.	0.8	20
71	Conjugate Harmonic Functions in Euclidean Space: a Spherical Approach. Computational Methods and Function Theory, 2006, 6, 165-182.	1.5	11
72	A new Hilbert transform on the unit sphere in. Complex Variables and Elliptic Equations, 2006, 51, 453-462.	0.8	14

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73	Generalized multidimensional Hilbert transforms in Clifford analysis. International Journal of Mathematics and Mathematical Sciences, 2006, 2006, 1-19.	0.7	20
74	On the Fourier Spectra of Distributions in Clifford Analysis. Chinese Annals of Mathematics Series B, 2006, 27, 495-506.	0.4	6
75	On the interplay between the Hilbert transform and conjugate harmonic functions. Mathematical Methods in the Applied Sciences, 2006, 29, 1435-1450.	2.3	30
76	A Calculus Scheme for Clifford Distributions. Tokyo Journal of Mathematics, 2006, 29, .	0.1	8
77	Determination of the heat-transfer coefficient during solidification of alloys. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 491-498.	6.6	17
78	Convolution kernels in Clifford analysis: old and new. Mathematical Methods in the Applied Sciences, 2005, 28, 2173-2182.	2.3	3
79	Multi–vector Spherical Monogenics, Spherical Means and Distributions in Clifford Analysis. Acta Mathematica Sinica, English Series, 2005, 21, 1197-1208.	0.6	4
80	Finite Element Approximation of a 2D–1D Contact Eigenvalue Problem. Numerical Functional Analysis and Optimization, 2005, 25, 349-362.	1.4	1
81	HILBERT-DIRAC OPERATORS IN CLIFFORD ANALYSIS. Chinese Annals of Mathematics Series B, 2005, 26, 1-14.	0.4	17
82	On the Fourier transform of distributions and differential operators in Clifford analysis. Complex Variables and Elliptic Equations, 2004, 49, 1079-1091.	0.2	3
83	Finite Element Approximation of a Contact Vector Eigenvalue Problem. Applications of Mathematics, 2003, 48, 559-571.	0.9	1
84	The l.s.c. regularization of the Signorini problem in plasticity. Mathematical Methods in the Applied Sciences, 2002, 25, 709-727.	2.3	0
85	On an inverse problem of pressure recovery arising from soil venting facilities. Applied Mathematics and Computation, 2002, 129, 469-480.	2.2	10
86	A nonlinear boundary value problem containing nonstandard boundary conditions. Applied Mathematics and Computation, 2002, 132, 559-574.	2.2	1
87	Finite element analysis of a coupling eigenvalue problem on overlapping domains. Journal of Computational and Applied Mathematics, 2001, 132, 141-153.	2.0	3
88	A finite element method for differential eigenvalue problems with mixed classical and (semi-)periodic boundary conditions. Applied Mathematics and Computation, 2001, 121, 1-15.	2.2	4
89	Numerical modelling of convection dominated transport coupled with density driven flow in porous media. Advances in Water Resources, 2000, 24, 63-72.	3.8	90
90	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

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91	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
92	A finite element method for elliptic eigenvalue problems in a multi-component domain in 2D with non-local Dirichlet transition conditions. Journal of Computational and Applied Mathematics, 1999, 111, 253-265.	2.0	3
93	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
94	On a variational approximation method for 2nd order eigenvalue problems in a multi-component domain with nonlocal dlrichlet transition conditions. Numerical Functional Analysis and Optimization, 1998, 19, 971-993.	1.4	4
95	On a finite element method for second order elliptic eigenvalue problems with nonlocal direchlet boundary conditions. Numerical Functional Analysis and Optimization, 1997, 18, 283-295.	1.4	5
96	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