

# Deguang Han

## List of Publications by Year in descending order

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102  
papers

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236925  
25  
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233421  
45  
g-index

108  
all docs

108  
docs citations

108  
times ranked

413  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Frames, bases and group representations. <i>Memoirs of the American Mathematical Society</i> , 2000, 147, 0-0.  | 0.9 | 197       |
| 2  | On the spectra of a Cantor measure. <i>Advances in Mathematics</i> , 2009, 221, 251-276.  | 1.1 | 128       |
| 3  | Frames Associated with Measurable Spaces. <i>Advances in Computational Mathematics</i> , 2003, 18, 127-147.   | 1.6 | 105       |
| 4  | Optimal dual frames for erasures. <i>Linear Algebra and Its Applications</i> , 2010, 432, 471-482.  | 0.9 | 101       |
| 5  | Optimal dual frames for erasures II. <i>Linear Algebra and Its Applications</i> , 2011, 435, 1464-1472.   | 0.9 | 100       |
| 6  | Optimal Dual Frames for Communication Coding With Probabilistic Erasures. <i>IEEE Transactions on Signal Processing</i> , 2011, 59, 5380-5389.              | 5.3 | 92        |
| 7  | Reconstruction of Signals From Frame Coefficients With Erasures at Unknown Locations. <i>IEEE Transactions on Information Theory</i> , 2014, 60, 4013-4025. | 2.4 | 88        |
| 8  | Linearly connected sequences and spectrally optimal dual frames for erasures. <i>Journal of Functional Analysis</i> , 2013, 265, 2855-2876.                 | 1.4 | 75        |
| 9  | Lattice tiling and the Weylâ€”Heisenberg frames. <i>Geometric and Functional Analysis</i> , 2001, 11, 742-758.  | 1.8 | 66        |
| 10 | On the Beurling dimension of exponential frames. <i>Advances in Mathematics</i> , 2011, 226, 285-297.   | 1.1 | 66        |
| 11 | Basic properties of wavelets. <i>Journal of Fourier Analysis and Applications</i> , 1998, 4, 575-594.   | 1.0 | 58        |
| 12 | Balianâ€“Low phenomenon for subspace Gabor frames. <i>Journal of Mathematical Physics</i> , 2004, 45, 3362-3378.  | 1.1 | 53        |
| 13 | Divergence of the mock and scrambled Fourier series on fractal measures. <i>Transactions of the American Mathematical Society</i> , 2014, 366, 2191-2208.   | 0.9 | 53        |
| 14 | Subspace Weyl-Heisenberg frames. <i>Journal of Fourier Analysis and Applications</i> , 2001, 7, 419-433.  | 1.0 | 51        |
| 15 | Sampling Expansions in Reproducing Kernel Hilbert and Banach Spaces. <i>Numerical Functional Analysis and Optimization</i> , 2009, 30, 971-987.             | 1.4 | 44        |
| 16 | The Balianâ€“Low theorem for symplectic lattices in higher dimensions. <i>Applied and Computational Harmonic Analysis</i> , 2002, 13, 169-176.              | 2.2 | 43        |
| 17 | The uniqueness of the dual of Weylâ€“Heisenberg subspace frames. <i>Applied and Computational Harmonic Analysis</i> , 2004, 17, 226-240.                    | 2.2 | 43        |
| 18 | Frame wavelets in subspaces of $L^2(\mathbb{R}^d)$ . <i>Proceedings of the American Mathematical Society</i> , 2002, 130, 3259-3267.                        | 0.8 | 42        |

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|----|---|-----|-----------|
| 19 | Frame representations and Parseval duals with applications to Gabor frames. <i>Transactions of the American Mathematical Society</i> , 2008, 360, 3307-3327.  | 0.9 | 41        |
| 20 | Orthogonal exponentials, translations, and Bohr completions. <i>Journal of Functional Analysis</i> , 2009, 257, 2999-3019.  | 1.4 | 40        |
| 21 | On multiresolution analysis (MRA) wavelets in $\mathbb{A}^n$ . <i>Journal of Fourier Analysis and Applications</i> , 2000, 6, 437-447.  | 1.0 | 37        |
| 22 | The existence of subspace wavelet sets. <i>Journal of Computational and Applied Mathematics</i> , 2003, 155, 83-90.   | 2.0 | 33        |
| 23 | Wandering vector multipliers for unitary groups. <i>Transactions of the American Mathematical Society</i> , 2001, 353, 3347-3371.   | 0.9 | 28        |
| 24 | Super-Wavelets and Decomposable Wavelet Frames. <i>Journal of Fourier Analysis and Applications</i> , 2005, 11, 683-696.  | 1.0 | 28        |
| 25 | Phase Retrieval From Multiple-Window Short-Time Fourier Measurements. <i>IEEE Signal Processing Letters</i> , 2017, 24, 372-376.  | 3.6 | 27        |
| 26 | Classification of Finite Group-Frames and Super-Frames. <i>Canadian Mathematical Bulletin</i> , 2007, 50, 85-96.  | 0.5 | 23        |
| 27 | Approximations for Gabor and wavelet frames. <i>Transactions of the American Mathematical Society</i> , 2003, 355, 3329-3342.   | 0.9 | 21        |
| 28 | Riesz bases and their dual modular frames in Hilbert $\langle \text{mml:math} \rangle$<br>xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif"<br>overflow="scroll"> $\langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle C \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{\wedge} \langle / \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle / \text{mml:math} \rangle$ -modules. <sup>1.0</sup><br><i>Journal of Mathematical Analysis and Applications</i> , 2008, 343, 246-256. | 21  |           |
| 29 | Probability modelled optimal frames for erasures. <i>Linear Algebra and Its Applications</i> , 2013, 438, 4222-4236.  | 0.9 | 21        |
| 30 | Phase Retrievable Projective Representation Frames for Finite Abelian Groups. <i>Journal of Fourier Analysis and Applications</i> , 2019, 25, 86-100.   | 1.0 | 21        |
| 31 | Constructing super Gabor frames: the rational time-frequency lattice case. <i>Science China Mathematics</i> , 2010, 53, 3179-3186.  | 1.7 | 20        |
| 32 | Lattice tiling and density conditions for subspace Gabor frames. <i>Journal of Functional Analysis</i> , 2013, 265, 1170-1189.  | 1.4 | 20        |
| 33 | Operator valued frames and structured quantum channels. <i>Science China Mathematics</i> , 2011, 54, 2361-2372.   | 1.7 | 19        |
| 34 | Wandering vectors for irrational rotation unitary systems. <i>Transactions of the American Mathematical Society</i> , 1998, 350, 309-320.   | 0.9 | 18        |
| 35 | Dilations and Completions for Gabor Systems. <i>Journal of Fourier Analysis and Applications</i> , 2009, 15, 201-217.   | 1.0 | 17        |
| 36 | When a characteristic function generates a Gabor frame. <i>Applied and Computational Harmonic Analysis</i> , 2008, 24, 290-309.   | 2.2 | 16        |

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|----|--|-----|-----------|
| 37 | Dilation of Dual Frame Pairs in Hilbert C*-Modules. <i>Results in Mathematics</i> , 2013, 63, 241-250.   | 0.8 | 16        |
| 38 | Discrete Gabor frames in $\ell^2(\mathbb{Z}^d)$ . <i>Proceedings of the American Mathematical Society</i> , 2013, 141, 3839-3851.                    | 0.8 | 16        |
| 39 | Orthonormal dilations of Parseval wavelets. <i>Mathematische Annalen</i> , 2008, 341, 483-515.   | 1.4 | 14        |
| 40 | Frame duality properties for projective unitary representations. <i>Bulletin of the London Mathematical Society</i> , 2008, 40, 685-695.             | 0.8 | 14        |
| 41 | Perturbation of frames and Riesz bases in Hilbert $\ell^2(\mathbb{Z}^d)$ . <i>Linear Algebra and Its Applications</i> , 2009, 431, 746-759.          | 0.9 | 14        |
| 42 | The s-elementary frame wavelets are path connected. <i>Proceedings of the American Mathematical Society</i> , 2004, 132, 2567-2575.                  | 0.8 | 14        |
| 43 | Wavelets with Frame Multiresolution Analysis. <i>Journal of Fourier Analysis and Applications</i> , 2003, 9, 39-48.                                  | 1.0 | 13        |
| 44 | Frame wavelet sets in Rd. <i>Journal of Computational and Applied Mathematics</i> , 2003, 155, 69-82.  | 2.0 | 13        |
| 45 | On the Orthogonality of Frames and the Density and Connectivity of Wavelet Frames. <i>Acta Applicandae Mathematicae</i> , 2009, 107, 211-222.        | 1.0 | 13        |
| 46 | Bessel sequences of exponentials on fractal measures. <i>Journal of Functional Analysis</i> , 2011, 261, 2529-2539.                                  | 1.4 | 13        |
| 47 | Orthogonal projection decomposition of matrices and construction of fusion frames. <i>Advances in Computational Mathematics</i> , 2013, 38, 369-381. | 1.6 | 13        |
| 48 | Tight frame approximation for multi-frames and super-frames. <i>Journal of Approximation Theory</i> , 2004, 129, 78-93.                              | 0.8 | 12        |
| 49 | The existence of tight Gabor duals for Gabor frames and subspace Gabor frames. <i>Journal of Functional Analysis</i> , 2009, 256, 129-148.           | 1.4 | 12        |
| 50 | A duality principle for groups. <i>Journal of Functional Analysis</i> , 2009, 257, 1133-1143.  | 1.4 | 12        |
| 51 | Continuous and discrete Fourier frames for fractal measures. <i>Transactions of the American Mathematical Society</i> , 2013, 366, 1213-1235.        | 0.9 | 12        |
| 52 | Additive derivations of nest algebras. <i>Proceedings of the American Mathematical Society</i> , 1993, 119, 1165-1165.                               | 0.8 | 12        |
| 53 | On common fundamental domains. <i>Advances in Mathematics</i> , 2013, 239, 109-127.  | 1.1 | 11        |
| 54 | On twisted group frames. <i>Linear Algebra and Its Applications</i> , 2019, 569, 285-310.  | 0.9 | 11        |

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|----|---|-----|-----------|
| 55 | Aspects of Gabor Analysis and Operator Algebras., 2003,, 129-152.   | 11  |           |
| 56 | Spectrum of the products of operators and compact perturbations. Proceedings of the American Mathematical Society, 1994, 120, 755-760.                      | 0.8 | 11        |
| 57 | Centralizers and Jordan derivations for CSL subalgebras of von Neumann algebras. Journal of Operator Theory, 2013, 69, 117-133.                             | 0.4 | 11        |
| 58 | Recovery of signals from unordered partial frame coefficients. Applied and Computational Harmonic Analysis, 2018, 44, 38-58.                                | 2.2 | 10        |
| 59 | On $\gamma$ -submodules for reflexive operator algebras. Proceedings of the American Mathematical Society, 1988, 104, 1067-1070.                            | 0.8 | 10        |
| 60 | Constrained quadratic correlation filters for target detection. Applied Optics, 2004, 43, 304.  | 2.1 | 9         |
| 61 | Local derivations of nest algebras. Proceedings of the American Mathematical Society, 1995, 123, 3095-3100.   | 0.8 | 8         |
| 62 | Derivations on the algebra of operators in hilbert $C^*$ -modules. Acta Mathematica Sinica, English Series, 2012, 28, 1615-1622.                            | 0.6 | 8         |
| 63 | Wavelet frames for (not necessarily reducing) affine subspaces II: The structure of affine subspaces. Journal of Functional Analysis, 2011, 260, 1615-1636. | 1.4 | 7         |
| 64 | Dilations of operator-valued measures with bounded p-variations and framings on Banach spaces. Journal of Functional Analysis, 2018, 274, 1466-1490.        | 1.4 | 7         |
| 65 | Gabor frames and operator algebras., 2000,, .   | 6   |           |
| 66 | Functional Gabor frame multipliers. Journal of Geometric Analysis, 2003, 13, 467-478.   | 1.0 | 6         |
| 67 | Sampling expansions for functions having values in a Banach space. Proceedings of the American Mathematical Society, 2005, 133, 3597-3607.                  | 0.8 | 6         |
| 68 | Wavelet frames for (not necessarily reducing) affine subspaces. Applied and Computational Harmonic Analysis, 2009, 27, 47-54.                               | 2.2 | 6         |
| 69 | Dilations for systems of imprimitivity acting on Banach spaces. Journal of Functional Analysis, 2014, 266, 6914-6937.                                       | 1.4 | 6         |
| 70 | Adaptive Optimal Dual Frames for Signal Reconstruction With Erasures. IEEE Access, 2016, 4, 7577-7584.  | 4.2 | 6         |
| 71 | Phase-retrievable operator-valued frames and representations of quantum channels. Linear Algebra and Its Applications, 2019, 579, 148-168.                  | 0.9 | 6         |
| 72 | Spectrally two-uniform frames for erasures. Operators and Matrices, 2015,, 383-399.   | 0.3 | 6         |

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|----|--|-----|-----------|
| 73 | The first cohomology groups of nest algebras on normed spaces. <i>Proceedings of the American Mathematical Society</i> , 1993, 118, 1147-1147.                 | 0.8 | 5         |
| 74 | Joint similarities and parameterizations for Naimark complementary frames. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 462, 148-156.      | 1.0 | 5         |
| 75 | Frames, modular functions for shift-invariant subspaces and FMRA wavelet frames. <i>Proceedings of the American Mathematical Society</i> , 2004, 133, 815-825. | 0.8 | 4         |
| 76 | Parseval frames for ICC groups. <i>Journal of Functional Analysis</i> , 2009, 256, 3071-3090.  | 1.4 | 4         |
| 77 | Matrix Fourier multipliers for Parseval multi-wavelet frames. <i>Applied and Computational Harmonic Analysis</i> , 2013, 35, 407-418.                          | 2.2 | 4         |
| 78 | A note on the density theorem for projective unitary representations. <i>Proceedings of the American Mathematical Society</i> , 2016, 145, 1739-1745.          | 0.8 | 4         |
| 79 | Continuous framings for Banach spaces. <i>Journal of Functional Analysis</i> , 2016, 271, 992-1021.  | 1.4 | 4         |
| 80 | Stable recovery of signals from frame coefficients with erasures at unknown locations. <i>Science China Mathematics</i> , 2018, 61, 151-172.                   | 1.7 | 4         |
| 81 | Erasure recovery matrices for encoder protection. <i>Applied and Computational Harmonic Analysis</i> , 2020, 48, 766-786.                                      | 2.2 | 4         |
| 82 | Phases for dyadic orthonormal wavelets. <i>Journal of Mathematical Physics</i> , 2002, 43, 2690.   | 1.1 | 3         |
| 83 | Topological and geometric properties of refinable functions and MRA affine frames. <i>Applied and Computational Harmonic Analysis</i> , 2011, 30, 151-174.     | 2.2 | 3         |
| 84 | Frame Phase-Retrievability and Exact Phase-Retrievable Frames. <i>Journal of Fourier Analysis and Applications</i> , 2019, 25, 3154-3173.                      | 1.0 | 3         |
| 85 | Injective continuous frames and quantum detections. <i>Banach Journal of Mathematical Analysis</i> , 2021, 15, 1.  | 0.8 | 3         |
| 86 | FROG-measurement based phase retrieval for analytic signals. <i>Applied and Computational Harmonic Analysis</i> , 2021, 55, 199-222.                           | 2.2 | 3         |
| 87 | Interpolation operators associated with sub-frame sets. <i>Proceedings of the American Mathematical Society</i> , 2002, 131, 275-284.                          | 0.8 | 2         |
| 88 | Frame vector multipliers for finite group representations. <i>Linear Algebra and Its Applications</i> , 2017, 519, 191-207.                                    | 0.9 | 2         |
| 89 | Phase Retrieval of Real-valued Functions in Sobolev Space. <i>Acta Mathematica Sinica, English Series</i> , 2018, 34, 1778-1794.                               | 0.6 | 2         |
| 90 | Nonuniform sampling and approximation in Sobolev space from perturbation of the framelet system. <i>Science China Mathematics</i> , 2021, 64, 351-372.         | 1.7 | 2         |

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|-----|---|-----|-----------|
| 91  | Unitary Systems and Bessel Generator Multipliers., 2011,, 131-150.  |     | 2         |
| 92  | <title>Tight frame approximations for Gabor and wavelet frames</title&gt., 2001, ,.   |     | 1         |
| 93  | Frames and their associated \$emph{H}_{{\kern-2pt}{{\kern-2pt}\mathbf{F}}}^{\mathbf{p}}\$ -subspaces. Advances in Computational Mathematics, 2011, 34, 185-200. | 1.6 | 1         |
| 94  | Functional Matrix Multipliers for Parseval Gabor Multi-frame Generators. Acta Applicandae Mathematicae, 2019, 160, 53-65.                                       | 1.0 | 1         |
| 95  | Structural Properties of Homomorphism Dilation Systems. Chinese Annals of Mathematics Series B, 2020, 41, 585-600.  | 0.4 | 1         |
| 96  | Extensions of operators. Indiana University Mathematics Journal, 2004, 53, 1151-1170.   | 0.9 | 1         |
| 97  | Separating vectors for operators. Proceedings of the American Mathematical Society, 2006, 135, 713-723.   | 0.8 | 0         |
| 98  | Refining Algorithms in Correlation Filter Design for Target Detection., 2008, ,.  |     | 0         |
| 99  | Iterative Approximations of Exponential Bases on Fractal Measures. Numerical Functional Analysis and Optimization, 2012, 33, 928-950.                           | 1.4 | 0         |
| 100 | The correlation numerical range of a matrix and Connesâ€™ embedding problem. Linear Algebra and Its Applications, 2012, 436, 3139-3148.                         | 0.9 | 0         |
| 101 | Frames and Finite-Rank Integral Representations of Positive Operator-Valued Measures. Acta Applicandae Mathematicae, 2020, 166, 11-27.                          | 1.0 | 0         |
| 102 | Gabor single-frame and multi-frame multipliers in any given dimension. Journal of Functional Analysis, 2021, 280, 108960.                                       | 1.4 | 0         |