

Victor Vinnikov

List of Publications by Year in descending order

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1,189
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471371

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33
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54
all docs

54
docs citations

54
times ranked

236
citing authors

#	ARTICLE	IF	CITATIONS
1	Linear matrix inequality representation of sets. Communications on Pure and Applied Mathematics, 2007, 60, 654-674.	1.2	218
2	Noncommutative convexity arises from linear matrix inequalities. Journal of Functional Analysis, 2006, 240, 105-191.	0.7	92
3	Self-adjoint determinantal representations of real plane curves. Mathematische Annalen, 1993, 296, 453-479.	0.7	86
4	Scattering Systems with Several Evolutions and Multidimensional Input/State/Output Systems. Integral Equations and Operator Theory, 2005, 52, 323-393.	0.4	66
5	Singularities of rational functions and minimal factorizations: The noncommutative and the commutative setting. Linear Algebra and Its Applications, 2009, 430, 869-889.	0.4	66
6	Complete description of determinantal representations of smooth irreducible curves. Linear Algebra and Its Applications, 1989, 125, 103-140.	0.4	55
7	Convex Matrix Inequalities Versus Linear Matrix Inequalities. IEEE Transactions on Automatic Control, 2009, 54, 952-964.	3.6	45
8	Zero-pole interpolation for matrix meromorphic functions on a compact Riemann surface and a matrix Fay trisecant identity. American Journal of Mathematics, 1999, 121, 841-888.	0.5	40
9	Noncommutative rational functions, their difference-differential calculus and realizations. Multidimensional Systems and Signal Processing, 2012, 23, 49-77.	1.7	37
10	Noncommutative reproducing kernel Hilbert spaces. Journal of Functional Analysis, 2016, 271, 1844-1920.	0.7	35
11	Zero-pole interpolation for meromorphic matrix functions on an algebraic curve and transfer functions of 2D systems. Acta Applicandae Mathematicae, 1996, 45, 239-316.	0.5	34
12	Lax-Phillips scattering and conservative linear systems: a Cuntz-algebra multidimensional setting. Memoirs of the American Mathematical Society, 2005, 178, 0-0.	0.5	30
13	Classes of tuples of commuting contractions satisfying the multivariable von Neumann inequality. Journal of Functional Analysis, 2009, 256, 3035-3054.	0.7	29
14	Finite Dimensional de Branges Spaces on Riemann Surfaces. Journal of Functional Analysis, 2002, 189, 283-324.	0.7	25
15	Stable and real-zero polynomials in two variables. Multidimensional Systems and Signal Processing, 2016, 27, 1-26.	1.7	24
16	LMI Representations of Convex Semialgebraic Sets and Determinantal Representations of Algebraic Hypersurfaces: Past, Present, and Future. , 2012, , 325-349.		24
17	Formal Reproducing Kernel Hilbert Spaces: The Commutative and Noncommutative Settings. , 2003, , 77-134.		19
18	Determinantal representations of singular hypersurfaces in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll" \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi mathvariant="double-struck"} \rangle P \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle n \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle$. Advances in Mathematics, 2012, 231, 1619-1654.	0.5	17

#	ARTICLE	IF	CITATIONS
19	Non-commutative functions and the non-commutative free L [∞] -Hilbert formula. <i>Advances in Mathematics</i> , 2013, 236, 131-157.	0.5	17
20	Indefinite Hardy Spaces on Finite Bordered Riemann Surfaces. <i>Journal of Functional Analysis</i> , 2000, 172, 221-248.	0.7	15
21	Conservative Input-State-Output Systems with Evolution on a Multidimensional Integer Lattice. <i>Multidimensional Systems and Signal Processing</i> , 2005, 16, 133-198.	1.7	12
22	Hardy spaces on a finite bordered Riemann surface, multivariable operator model theory and Fourier analysis along a unimodular curve. , 2001, , 37-56.		11
23	Functional Models for Representations of the Cuntz Algebra. , 2005, , 1-60.		10
24	Un algorithme de Schur pour les fonctions de transfert des syst ^m mes surd ^o termin ^s invariants dans une direction. <i>Comptes Rendus Mathematique</i> , 2009, 347, 729-733.	0.1	9
25	Contractive determinantal representations of stable polynomials on a matrix polyball. <i>Mathematische Zeitschrift</i> , 2016, 283, 25-37.	0.4	9
26	Overdetermined Multidimensional Systems: State Space and Frequency Domain Methods. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2003, , 63-119.	0.5	9
27	Elementary transformations of determinantal representations of algebraic curves. <i>Linear Algebra and Its Applications</i> , 1990, 135, 1-18.	0.4	7
28	We shall know: Hilbert's apology. <i>Mathematical Intelligencer</i> , 1999, 21, 42-46.	0.1	7
29	Conservative linear systems, unitary colligations and Lax-Phillips scattering: multidimensional generalizations. <i>International Journal of Control</i> , 2004, 77, 802-811.	1.2	7
30	Commuting Nonselfadjoint Operators and Algebraic Curves. , 1992, , 348-371.		7
31	Noncommutative plurisubharmonic polynomials part I: Global assumptions. <i>Journal of Functional Analysis</i> , 2011, 261, 3390-3417.	0.7	6
32	Scattering Systems with Several Evolutions and Formal Reproducing Kernel Hilbert Spaces. <i>Complex Analysis and Operator Theory</i> , 2015, 9, 827-931.	0.3	6
33	Non-commutative positive kernels and their matrix evaluations. <i>Proceedings of the American Mathematical Society</i> , 2006, 134, 805-816.	0.4	6
34	Local theory of free noncommutative functions: germs, meromorphic functions, and Hermite interpolation. <i>Transactions of the American Mathematical Society</i> , 2020, 373, 5587-5625.	0.5	5
35	Schur Algorithm in The Class \mathcal{S}_J of J-contractive Functions Intertwining Solutions of Linear Differential Equations. <i>Integral Equations and Operator Theory</i> , 2012, 74, 313-344.	0.4	4
36	Dilations of Semigroups of Contractions Through Vessels. <i>Integral Equations and Operator Theory</i> , 2017, 87, 45-80.	0.4	4

#	ARTICLE	IF	CITATIONS
37	Representations of Lie algebras by non-skewselfadjoint operators in Hilbert space. Journal of Functional Analysis, 2019, 276, 1-44.	0.7	4
38	de Branges spaces on compact Riemann surfaces and a Beurling-Lax type theorem. Advances in Mathematics, 2020, 373, 107315.	0.5	4
39	A behavioral interpretation of LivÅšic systems. Multidimensional Systems and Signal Processing, 2012, 23, 17-48.	1.7	3
40	Null/Pole Interpolation Problem in the Class \mathcal{R}_l of Rational Functions Intertwining Solutions of Linear Differential Equations. Complex Analysis and Operator Theory, 2015, 9, 1-19.	0.3	3
41	Convex Entire Noncommutative Functions are Polynomials of Degree Two or Less. Integral Equations and Operator Theory, 2016, 86, 151-163.	0.4	3
42	H^2 Spaces of Non-commutative Functions. Complex Analysis and Operator Theory, 2018, 12, 945-967.	0.3	3
43	Meromorphic matrix trivializations of factors of automorphy over a Riemann surface. Operators and Matrices, 2016, , 785-828.	0.1	3
44	Rational Inner Functions on a Square-Matrix Polyball. Association for Women in Mathematics Series, 2017, , 267-277.	0.1	3
45	Null- and Positivstellensätze for rationally resolvable ideals. Linear Algebra and Its Applications, 2017, 527, 260-293.	0.4	2
46	Fonctions de Carathéodory sur une surface de Riemann et espaces Å noyau reproduisant associ@s. Comptes Rendus Mathématique, 2001, 333, 523-528.	0.5	1
47	State feedback for overdetermined 2D systems: pole placement for bundle maps over an algebraic curve. , 2009, , .		1
48	Real Algebraic Geometry With a View Toward Moment Problems and Optimization. Oberwolfach Reports, 2018, 14, 771-862.	0.0	1
49	How to count zeroes of polynomials on quadrature domains using the Bezout matrix. Advances in Mathematics, 2019, 352, 1-26.	0.5	1
50	Pole placement for overdetermined 2D systems. Linear Algebra and Its Applications, 2021, 610, 529-559.	0.4	1
51	Realizations of non-commutative rational functions around a matrix centre, I: synthesis, minimal realizations and evaluation on stably finite algebras. Journal of the London Mathematical Society, 2021, 104, 1250-1299.	0.5	1
52	Rational functions in noncommutating variables, their realizations, and applications to Linear Matrix inequalities. , 2009, , .		0
53	Concrete Interpolation of Meromorphic Matrix Functions on Riemann Surfaces. , 2002, , 137-156.		0