

Marco Bertola

List of Publications by Year in descending order

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citations

361296

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33
g-index

86
all docs

86
docs citations

86
times ranked

439
citing authors

#	ARTICLE	IF	CITATIONS
1	Abelianization of Matrix Orthogonal Polynomials. International Mathematics Research Notices, 2023, 2023, 8544-8595.	0.5	1
2	Nonlinear steepest descent approach to orthogonality on elliptic curves. Journal of Approximation Theory, 2022, 276, 105717.	0.5	5
3	On the tau function of the hypergeometric equation. Physica D: Nonlinear Phenomena, 2022, , 133381.	1.3	2
4	Spaces of Abelian Differentials and Hitchin's Spectral Covers. International Mathematics Research Notices, 2021, 2021, 11246-11269.	0.5	2
5	Matrix models for stationary Gromov-Witten invariants of the Riemann sphere. Nonlinearity, 2021, 34, 1168-1196.	0.6	2
6	WKB expansion for a Yang-Yang generating function and the Bergman tau function. Theoretical and Mathematical Physics(Russian Federation), 2021, 206, 258-295.	0.3	2
7	Inversion formula and range conditions for a linear system related with the multi-interval finite Hilbert transform in L^2 . Mathematische Nachrichten, 2021, 294, 1523-1546.	0.4	0
8	Padé approximants on Riemann surfaces and KP tau functions. Analysis and Mathematical Physics, 2021, 11, 1.	0.6	5
9	Tau-Functions and Monodromy Symplectomorphisms. Communications in Mathematical Physics, 2021, 388, 245-290.	1.0	5
10	Hodge and Prym Tau Functions, Strebel Differentials and Combinatorial Model of $\mathcal{M}_{g,n}$. Communications in Mathematical Physics, 2020, 378, 1279-1341.	1.0	3
11	Diagonalization of the finite Hilbert transform on two adjacent intervals: the Riemann-Hilbert approach. Analysis and Mathematical Physics, 2020, 10, 27.	0.6	2
12	Generating weighted Hurwitz numbers. Journal of Mathematical Physics, 2020, 61, 013506.	0.5	4
13	Rationally weighted Hurwitz numbers, Meijer G-functions and matrix integrals. Journal of Mathematical Physics, 2019, 60, 103504.	0.5	7
14	The Kontsevich-Penner Matrix Integral, Isomonodromic Tau Functions and Open Intersection Numbers. Annales Henri Poincare, 2019, 20, 393-443.	0.8	8
15	Laguerre polynomials and transitional asymptotics of the modified Korteweg-de Vries equation for step-like initial data. Analysis and Mathematical Physics, 2019, 9, 1761-1818.	0.6	7
16	Brezin-Gross-Witten tau function and isomonodromic deformations. Communications in Number Theory and Physics, 2019, 13, 827-883.	0.3	8
17	Discriminant Circle Bundles over Local Models of Strebel Graphs and Boutroux Curves. Theoretical and Mathematical Physics(Russian Federation), 2018, 197, 1535-1571.	0.3	2
18	Noncommutative Painlevé Equations and Systems of Calogero Type. Communications in Mathematical Physics, 2018, 363, 503-530.	1.0	14

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19	Maximal amplitudes of finite-gap solutions for the focusing Nonlinear Schrödinger Equation. Communications in Mathematical Physics, 2017, 354, 525-547.	1.0	24
20	Universality of the matrix Airy and Bessel functions at spectral edges of unitary ensembles. Random Matrices: Theory and Application, 2017, 06, 1750010.	0.5	2
21	Universality of the Peregrine Soliton in the Focusing Dynamics of the Cubic Nonlinear Schrödinger Equation. Physical Review Letters, 2017, 119, 033901.	2.9	103
22	Symplectic geometry of the moduli space of projective structures in homological coordinates. Inventiones Mathematicae, 2017, 210, 759-814.	1.3	16
23	The Kontsevich Matrix Integral: Convergence to the Painlevé Hierarchy and Stokes™ Phenomenon. Communications in Mathematical Physics, 2017, 352, 585-619.	1.0	6
24	Universal peregrine soliton structure in optical fibre soliton compression. , 2017, , .		0
25	Singular Value Decomposition of a Finite Hilbert Transform Defined on Several Intervals and the Interior Problem of Tomography: The Riemann-Hilbert Problem Approach. Communications on Pure and Applied Mathematics, 2016, 69, 407-477.	1.2	10
26	Simple Lie Algebras and Topological ODEs. International Mathematics Research Notices, 2016, , rnw285.	0.5	6
27	Rogue waves in multiphase solutions of the focusing nonlinear Schrödinger equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160340.	1.0	36
28	On Sobolev instability of the interior problem of tomography. Journal of Mathematical Analysis and Applications, 2016, 438, 962-990.	0.5	3
29	Hankel Determinant Approach to Generalized Vorobev-Yablonski Polynomials and Their Roots. Constructive Approximation, 2016, 44, 417-453.	1.8	12
30	Correlation functions of the KdV hierarchy and applications to intersection numbers over M . Physica D: Nonlinear Phenomena, 2016, 327, 30-57.	1.3	36
31	Zeros of Large Degree Vorobev-Yablonski Polynomials via a Hankel Determinant Identity. International Mathematics Research Notices, 2015, 2015, 9330-9399.	0.5	21
32	A degeneration of two-phase solutions of the focusing nonlinear Schrödinger equation via Riemann-Hilbert problems. Journal of Mathematical Physics, 2015, 56, 061507.	0.5	6
33	Strong Asymptotics of the Orthogonal Polynomials with Respect to a Measure Supported on the Plane. Communications on Pure and Applied Mathematics, 2015, 68, 112-172.	1.2	23
34	Asymptotics of Orthogonal Polynomials with Complex Varying Quartic Weight: Global Structure, Critical Point Behavior and the First Painlevé Equation. Constructive Approximation, 2015, 41, 529-587.	1.8	11
35	Darboux Transformations and Random Point Processes: Fig. 1.. International Mathematics Research Notices, 2015, 2015, 6211-6266.	0.5	9
36	Universality Conjecture and Results for a Model of Several Coupled Positive-Definite Matrices. Communications in Mathematical Physics, 2015, 337, 1077-1141.	1.0	25

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37	Meromorphic differentials with imaginary periods on degenerating hyperelliptic curves. <i>Analysis and Mathematical Physics</i> , 2015, 5, 1-22.	0.6	5
38	The partition function of the extended r -reduced Kadomtsev–Petviashvili hierarchy. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 195205.	0.7	12
39	Cauchy–Laguerre Two-Matrix Model and the Meijer-G Random Point Field. <i>Communications in Mathematical Physics</i> , 2014, 326, 111-144.	1.0	47
40	Spectra of Random Hermitian Matrices with a Small-Rank External Source: The Supercritical and Subcritical Regimes. <i>Journal of Statistical Physics</i> , 2013, 153, 654-697.	0.5	6
41	Universality for the Focusing Nonlinear Schrödinger Equation at the Gradient Catastrophe Point: Rational Breathers and Poles of the Triconfluent Solution to Painlevé I. <i>Communications on Pure and Applied Mathematics</i> , 2013, 66, 678-752.	1.2	105
42	Strong asymptotics for Cauchy biorthogonal polynomials with application to the Cauchy two-matrix model. <i>Journal of Mathematical Physics</i> , 2013, 54, .	0.5	13
43	THE GAP PROBABILITIES OF THE TACNODE, PEARCEY AND AIRY POINT PROCESSES, THEIR MUTUAL RELATIONSHIP AND EVALUATION. <i>Random Matrices: Theory and Application</i> , 2013, 02, 1350003.	0.5	10
44	Inversion formulae for the \cosh -weighted Hilbert transform. <i>Proceedings of the American Mathematical Society</i> , 2013, 141, 2703-2718.	0.4	3
45	The Transition between the Gap Probabilities from the Pearcey to the Airy Process—a Riemann–Hilbert Approach. <i>International Mathematics Research Notices</i> , 2012, 2012, 1519-1568.	0.5	39
46	On the location of poles for the Ablowitz–Segur family of solutions to the second Painlevé equation. <i>Nonlinearity</i> , 2012, 25, 1179-1185.	0.6	16
47	Riemann–Hilbert approach to multi-time processes: The Airy and the Pearcey cases. <i>Physica D: Nonlinear Phenomena</i> , 2012, 241, 2237-2245.	1.3	18
48	Fredholm Determinants and Pole-free Solutions to the Noncommutative Painlevé II Equation. <i>Communications in Mathematical Physics</i> , 2012, 309, 793-833.	1.0	13
49	Spectra of Random Hermitian Matrices with a Small-Rank External Source: The Critical and Near-Critical Regimes. <i>Journal of Statistical Physics</i> , 2012, 146, 475-518.	0.5	11
50	Boutroux curves with external field: equilibrium measures without a variational problem. <i>Analysis and Mathematical Physics</i> , 2011, 1, 167-211.	0.6	28
51	The Dependence on the Monodromy Data of the Isomonodromic Tau Function. <i>Communications in Mathematical Physics</i> , 2010, 294, 539-579.	1.0	41
52	First Colonization of a Hard-Edge in Random Matrix Theory. <i>Constructive Approximation</i> , 2010, 31, 231-257.	1.8	5
53	Cauchy biorthogonal polynomials. <i>Journal of Approximation Theory</i> , 2010, 162, 832-867.	0.5	47
54	The partition function of the two-matrix model as an isomonodromic $\check{\tau}$, function. <i>Journal of Mathematical Physics</i> , 2009, 50, 013529.	0.5	10

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55	Moment determinants as isomonodromic tau functions. <i>Nonlinearity</i> , 2009, 22, 29-50.	0.6	10
56	Cubic string boundary value problems and Cauchy biorthogonal polynomials. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 454006.	0.7	10
57	Topological expansion for the Cauchy two-matrix model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 335201.	0.7	1
58	Mesoscopic colonization of a spectral band. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 415204.	0.7	1
59	Regularity of a vector potential problem and its spectral curve. <i>Journal of Approximation Theory</i> , 2009, 161, 353-370.	0.5	14
60	The Cauchy Two-Matrix Model. <i>Communications in Mathematical Physics</i> , 2009, 287, 983-1014.	1.0	44
61	First Colonization of a Spectral Outpost in Random Matrix Theory. <i>Constructive Approximation</i> , 2009, 30, 225-263.	1.8	23
62	Commuting difference operators, spinor bundles and the asymptotics of orthogonal polynomials with respect to varying complex weights. <i>Advances in Mathematics</i> , 2009, 220, 154-218.	0.5	26
63	Effective Inverse Spectral Problem for Rational Lax Matrices and Applications. <i>International Mathematics Research Notices</i> , 2007, 2007, .	0.5	1
64	Biorthogonal polynomials for two-matrix models with semiclassical potentials. <i>Journal of Approximation Theory</i> , 2007, 144, 162-212.	0.5	17
65	Biorthogonal Laurent Polynomials, Toplitz Determinants, Minimal Toda Orbits and Isomonodromic Tau Functions. <i>Constructive Approximation</i> , 2007, 26, 383-430.	1.8	18
66	Massless Scalar Field in a Two-dimensional de Sitter Universe. <i>Progress in Mathematics</i> , 2007, , 27-38.	0.2	8
67	Random matrices and integrable systems: introduction and overview. <i>Journal of Physics A</i> , 2006, 39, .	1.6	0
68	The PDEs of Biorthogonal Polynomials Arising in the Two-Matrix Model. <i>Mathematical Physics Analysis and Geometry</i> , 2006, 9, 23-52.	0.4	10
69	Semiclassical Orthogonal Polynomials, Matrix Models and Isomonodromic Tau Functions. <i>Communications in Mathematical Physics</i> , 2006, 263, 401-437.	1.0	47
70	Two-matrix model with semiclassical potentials and extended Whitham hierarchy. <i>Journal of Physics A</i> , 2006, 39, 8823-8855.	1.6	7
71	Title is missing!. <i>International Mathematics Research Papers</i> , 2005, 2005, 565.	0.3	15
72	Duality of Spectral Curves Arising in Two-Matrix Models. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 2003, 134, 27-38.	0.3	14

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73	Differential Systems for Biorthogonal Polynomials Appearing in 2-Matrix Models and the Associated Riemann-Hilbert Problem. Communications in Mathematical Physics, 2003, 243, 193-240.	1.0	56
74	Bilinear semiclassical moment functionals and their integral representation. Journal of Approximation Theory, 2003, 121, 71-99.	0.5	18
75	Free energy of the two-matrix model/dToda tau-function. Nuclear Physics B, 2003, 669, 435-461.	0.9	25
76	Partition functions for matrix models and isomonodromic tau functions. Journal of Physics A, 2003, 36, 3067-3083.	1.6	36
77	Second and third order observables of the two-matrix model. Journal of High Energy Physics, 2003, 2003, 062-062.	1.6	10
78	Mixed correlation functions of the two-matrix model. Journal of Physics A, 2003, 36, 7733-7750.	1.6	15
79	Coherent state realizations of $su(n+1)$ on the torus. Journal of Mathematical Physics, 2002, 43, 3425-3444.	0.5	10
80	Duality, Biorthogonal Polynomials and Multi-Matrix Models. Communications in Mathematical Physics, 2002, 229, 73-120.	1.0	78
81	Frobenius manifold structure on orbit space of Jacobi groups; Part I. Differential Geometry and Its Applications, 2000, 13, 19-41.	0.2	28
82	Universality in the Profile of the Semiclassical Limit Solutions to the Focusing Nonlinear Schrodinger Equation at the First Breaking Curve. International Mathematics Research Notices, 0, , .	0.5	5
83	Harish-Chandra Integrals as Nilpotent Integrals. International Mathematics Research Notices, 0, , .	0.5	0
84	Stokes Manifolds and Cluster Algebras. Communications in Mathematical Physics, 0, , .	1.0	1