

JosÃ© L LÃ³pez

List of Publications by Year in descending order

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all docs

102
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102
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#	ARTICLE	IF	CITATIONS
1	Asymptotic expansions of the Hurwitzâ€“Lerch zeta function. Journal of Mathematical Analysis and Applications, 2004, 298, 210-224.	0.5	66
2	Twoâ€“Point Taylor Expansions of Analytic Functions. Studies in Applied Mathematics, 2002, 109, 297-311.	1.1	43
3	An Asymptotic Expansion of the Double Gamma Function. Journal of Approximation Theory, 2001, 111, 298-314.	0.5	40
4	Asymptotic Expansions of Symmetric Standard Elliptic Integrals. SIAM Journal on Mathematical Analysis, 2000, 31, 754-775.	0.9	22
5	Multi-point Taylor expansions of analytic functions. Transactions of the American Mathematical Society, 2004, 356, 4323-4342.	0.5	21
6	Hermite Polynomials in Asymptotic Representations of Generalized Bernoulli, Euler, Bessel, and Buchholz Polynomials. Journal of Mathematical Analysis and Applications, 1999, 239, 457-477.	0.5	19
7	Incomplete gamma functions for large values of their variables. Advances in Applied Mathematics, 2005, 34, 467-485.	0.4	17
8	Multi-point Taylor approximations in one-dimensional linear boundary value problems. Applied Mathematics and Computation, 2009, 207, 519-527.	1.4	17
9	A simplification of Laplaceâ€™s method: Applications to the Gamma function and Gauss hypergeometric function. Journal of Approximation Theory, 2009, 161, 280-291.	0.5	16
10	A systematization of the saddle point method. Application to the Airy and Hankel functions. Journal of Mathematical Analysis and Applications, 2009, 354, 347-359.	0.5	15
11	Large degree asymptotics of generalized Bernoulli and Euler polynomials. Journal of Mathematical Analysis and Applications, 2010, 363, 197-208.	0.5	15
12	Convergent and asymptotic expansions of the Pearcey integral. Journal of Mathematical Analysis and Applications, 2015, 430, 181-192.	0.5	15
13	New series expansions of the Gauss hypergeometric function. Advances in Computational Mathematics, 2013, 39, 349-365.	0.8	14
14	Uniform Asymptotic Expansions of Symmetric Elliptic Integrals. Constructive Approximation, 2001, 17, 535-559.	1.8	13
15	Asymptotic Expansions of Generalized Stieltjes Transforms of Algebraically Decaying Functions. Studies in Applied Mathematics, 2002, 108, 187-215.	1.1	13
16	Analytic expansions of thermonuclear reaction rates. Journal of Physics A, 2004, 37, 2637-2659.	1.6	13
17	Asymptotic Expansions of Mellin Convolution Integrals. SIAM Review, 2008, 50, 275-293.	4.2	13
18	The Askey scheme for hypergeometric orthogonal polynomials viewed from asymptotic analysis. Journal of Computational and Applied Mathematics, 2001, 133, 623-633.	1.1	12

#	ARTICLE	IF	CITATIONS
19	Representations of hypergeometric functions for arbitrary parameter values and their use. Journal of Approximation Theory, 2017, 218, 42-70.	0.5	12
20	Homoclinic Connections of Unstable Plane Waves of the Long-Wave-Short-Wave Equations. Studies in Applied Mathematics, 2006, 117, 71-93.	1.1	11
21	Asymptotic expansions of the Appell's function F_4 . Quarterly of Applied Mathematics, 2004, 62, 235-257.	0.5	11
22	Asymptotic relations in the Askey scheme for hypergeometric orthogonal polynomials. Advances in Applied Mathematics, 2003, 31, 61-85.	0.4	10
23	The Gauss hypergeometric function ${}_2F_1(a, b; c; z)$. <small>xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:tbl_struct="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/xml/common/citation-element/dtd" xmlns:stb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/xml/common/citation-element/dtd"</small>	1.1	10
24	Asymptotic expansions of Mellin convolutions by means of analytic continuation. Journal of Computational and Applied Mathematics, 2007, 200, 628-636.	1.1	10
25	The confluent hypergeometric functions ${}_1F_1(a; z)$. <small>xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si75.gif" display="inline" overflow="scroll" <mml:mi>M</mml:mi><mml:mrow><mml:mo></mml:mo><mml:mi>a</mml:mi><mml:mo></mml:mo><mml:mi>b</mml:mi><mml:mo></mml:mo><mml:mi>c</mml:mi></mml:mrow><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si76.gif" display="inline" overflow="scroll" <mml:mi>M</mml:mi><mml:mrow><mml:mo></mml:mo><mml:mi>a</mml:mi><mml:mo></mml:mo><mml:mi>b</mml:mi><mml:mo></mml:mo><mml:mi>c</mml:mi></mml:mrow></small>	1.1	10

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37	Asymptotic expansions of the Lauricella hypergeometric function FD. Journal of Computational and Applied Mathematics, 2003, 151, 235-256.	1.1	6
38	Convergent asymptotic expansions of Charlier, Laguerre and Jacobi polynomials. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2004, 134, 537-555.	0.8	6
39	Asymptotic behaviour of three-dimensional singularly perturbed convection-diffusion problems with discontinuous data. Journal of Mathematical Analysis and Applications, 2007, 328, 931-945.	0.5	6
40	Orthogonal basis with a conicoid first mode for shape specification of optical surfaces. Optics Express, 2016, 24, 5448.	1.7	6
41	The Pearcey integral in the highly oscillatory region. Applied Mathematics and Computation, 2016, 275, 404-410.	1.4	6
42	Asymptotic Expansions for Two Singularly Perturbed Convection-Diffusion Problems with Discontinuous Data: The Quarter Plane and the Infinite Strip. Studies in Applied Mathematics, 2004, 113, 57-89.	1.1	5
43	Two Algorithms for Computing the Randles-Sevcik Function from Electrochemistry. Journal of Mathematical Chemistry, 2004, 35, 131-137.	0.7	5
44	The Liouville-Neumann expansion at a regular singular point. Journal of Difference Equations and Applications, 2009, 15, 119-132.	0.7	5
45	Two-point Taylor expansions and one-dimensional boundary value problems. Mathematics of Computation, 2010, 79, 2103-2103.	1.1	5
46	Olver's asymptotic method revisited; Case I. Journal of Mathematical Analysis and Applications, 2012, 395, 578-586.	0.5	5
47	Asymptotics ($\lim_{p \rightarrow \infty} \ \cdot\ _p$) of L_p -norms of hypergeometric orthogonal polynomials. Journal of Mathematical Chemistry, 2014, 52, 283-300.	0.7	5
48	New series expansions for the confluent hypergeometric function. Applied Mathematics and Computation, 2014, 235, 26-31.	1.4	5
49	Asymptotic behaviour of the Urbanik semigroup. Journal of Approximation Theory, 2015, 195, 109-121.	0.5	5
50	Number and amplitude of limit cycles emerging from topologically equivalent perturbed centers. Chaos, Solitons and Fractals, 2003, 17, 135-143.	2.5	4
51	Analytic Approximations for a Singularly Perturbed Convection-Diffusion Problem with Discontinuous Data in a Half-Infinite Strip. Acta Applicandae Mathematicae, 2004, 82, 101-117.	0.5	4
52	The role of the error function in a singularly perturbed convection-diffusion problem in a rectangle with corner singularities. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2007, 137, 93-109.	0.8	4
53	Asymptotics and numerics of polynomials used in Tricomi and Buchholz expansions of Kummer functions. Numerische Mathematik, 2010, 116, 269-289.	0.9	4
54	Asymptotic expansions of Mellin convolution integrals: An oscillatory case. Journal of Computational and Applied Mathematics, 2010, 233, 1562-1569.	1.1	4

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55	The Appell's function F_2 for large values of its variables. Quarterly of Applied Mathematics, 2010, 68, 701-712.	0.5	4
56	Convergent and asymptotic expansions of solutions of second-order differential equations with a large parameter. Analysis and Applications, 2014, 12, 523-536.	1.2	4
57	Analytic formulas for the evaluation of the Pearcey integral. Mathematics of Computation, 2016, 86, 2399-2407.	1.1	4
58	Uniform convergent expansions of integral transforms. Mathematics of Computation, 2021, 90, 1357-1380.	1.1	4
59	Uniform representations of the incomplete beta function in terms of elementary functions. Electronic Transactions on Numerical Analysis, 0, 48, 450-461.	0.0	4
60	Variation of parameters and solutions of composite products of linear differential equations. Journal of Mathematical Analysis and Applications, 2010, 369, 658-670.	0.5	3
61	Large degree asymptotics of generalized Bessel polynomials. Journal of Mathematical Analysis and Applications, 2011, 377, 30-42.	0.5	3
62	The third Appell function for one large variable. Journal of Approximation Theory, 2013, 165, 60-69.	0.5	3
63	Factorization of second-order linear differential equations and Liouville's Neumann expansions. Mathematical and Computer Modelling, 2013, 57, 1514-1530.	2.0	3
64	Convergent and asymptotic expansions of solutions of differential equations with a large parameter: Olver cases II and III. Journal of Integral Equations and Applications, 2015, 27, .	0.2	3
65	Uniform convergent expansions of the Gauss hypergeometric function in terms of elementary functions. Integral Transforms and Special Functions, 2018, 29, 942-954.	0.8	3
66	The asymptotic expansion of the swallowtail integral in the highly oscillatory region. Applied Mathematics and Computation, 2018, 339, 837-845.	1.4	3
67	A note on the asymptotic expansion of the Lerch's transcendent. Integral Transforms and Special Functions, 2019, 30, 844-855.	0.8	3
68	The swallowtail integral in the highly oscillatory region II. Electronic Transactions on Numerical Analysis, 0, 52, 88-99.	0.0	3
69	Analysis of singular one-dimensional linear boundary value problems using two-point Taylor expansions. Electronic Journal of Qualitative Theory of Differential Equations, 2020, , 1-21.	0.2	3
70	Asymptotic expansions of the double Zeta function. Journal of Mathematical Analysis and Applications, 2002, 274, 134-158.	0.5	2
71	The Lambert transform for small and large values of the transformation parameter. Quarterly of Applied Mathematics, 2006, 64, 515-527.	0.5	2
72	The Stokes phenomenon as a boundary-value problem. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 10807-10812.	0.7	2

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73	The Liouvilleâ€“Neumann expansion in one-dimensional boundary value problems. <i>Integral Transforms and Special Functions</i> , 2010, 21, 125-133.	0.8	2
74	A Systematic â€œSaddle Point Near a Poleâ€“Asymptotic Method with Application to the Gauss Hypergeometric Function. <i>Studies in Applied Mathematics</i> , 2011, 127, 24-37.	1.1	2
75	Two-point Taylor approximations of the solutions of two-dimensional boundary value problems. <i>Applied Mathematics and Computation</i> , 2012, 218, 9107-9115.	1.4	2
76	Asymptotics of the first Appell function F_1 with large parameters. <i>Integral Transforms and Special Functions</i> , 2013, 24, 715-733.	0.8	2
77	The swallowtail integral in the highly oscillatory region III. <i>Complex Variables and Elliptic Equations</i> , 2022, 67, 1262-1272.	0.4	2
78	Reflection anomaly in dimensions. <i>Journal of Physics A</i> , 1998, 31, 7955-7964.	1.6	1
79	Symmetric standard elliptic integrals with two or three large parameters. <i>Integral Transforms and Special Functions</i> , 2006, 17, 433-442.	0.8	1
80	Two-point Taylor expansions in the asymptotic approximation of double integrals. Application to the second and fourth Appell functions. <i>Journal of Mathematical Analysis and Applications</i> , 2008, 339, 530-541.	0.5	1
81	A singular perturbation problem with discontinuous data in a cuboid. <i>IMA Journal of Applied Mathematics</i> , 2008, 74, 35-45.	0.8	1
82	The Liouvilleâ€“Neumann approximation of the regular solutions of the Heun's equations. <i>Integral Transforms and Special Functions</i> , 2010, 21, 839-847.	0.8	1
83	Asymptotics of the first Appell function F_1 with large parameters II. <i>Integral Transforms and Special Functions</i> , 2013, 24, 982-999.	0.8	1
84	New series expansions of the F_2 function. <i>Journal of Mathematical Analysis and Applications</i> , 2015, 421, 982-995.	0.5	1
85	On a Modification of Olverâ€™s Method: A Special Case. <i>Constructive Approximation</i> , 2016, 43, 273-290.	1.8	1
86	The use of two-point Taylor expansions in singular one-dimensional boundary value problems I. <i>Journal of Mathematical Analysis and Applications</i> , 2018, 463, 708-725.	0.5	1
87	Uniformly convergent expansions for the generalized hypergeometric functions ${}_pF_q$ and ${}_pF_p$. <i>Integral Transforms and Special Functions</i> , 2020, 31, 820-837.	0.8	1
88	Uniform approximations of the first symmetric elliptic integral in terms of elementary functions. <i>Revista De La Real Academia De Ciencias Exactas, Físicas Y Naturales - Serie A: Matemáticas</i> , 2022, 116, 1.	0.6	1
89	Asymptotic approximation of singularly perturbed convection-diffusion problems with discontinuous derivatives of the Dirichlet data. <i>Quarterly of Applied Mathematics</i> , 2005, 63, 527-543.	0.5	1
90	A family of integrals analytically solvable. <i>International Journal of Computer Mathematics</i> , 2011, 88, 2721-2727.	1.0	0

#	ARTICLE	IF	CITATIONS
91	The Liouvilleâ€™Neumann expansion in singular eigenvalue problems. Applied Mathematics Letters, 2012, 25, 72-76.	1.5	0
92	Approximations of the Poisson transform for large and small values of the transformation parameter. Ramanujan Journal, 2013, 30, 309-326.	0.4	0
93	The Second Appell Function for one Large Variable. Mediterranean Journal of Mathematics, 2013, 10, 1853-1865.	0.4	0
94	Series expansions of multi-dimensional Mellin convolution integrals. Integral Transforms and Special Functions, 2014, 25, 888-897.	0.8	0
95	Computation of Mellin convolution integrals with a logarithmic kernel: application to the third Appell function. Integral Transforms and Special Functions, 2014, 25, 612-626.	0.8	0
96	Orthogonal basis with a conicoid first mode for shape specification of optical surfaces: reply. Optics Express, 2016, 24, 16499.	1.7	0
97	Convergent and Asymptotic Methods for Second-order Difference Equations with a Large Parameter. Mediterranean Journal of Mathematics, 2018, 15, 1.	0.4	0
98	New Analytic Representations of the Hypergeometric Functions ${}_pF_q$. Constructive Approximation, 0, , 1.	1.8	0
99	Asymptotic Reductions Between the Wilson Polynomials and the Lower Level Polynomials of the Askey Scheme. , 2014, , 653-690.		0
100	New recurrence relations for several classical families of polynomials. Journal of Difference Equations and Applications, 2021, 27, 1512-1523.	0.7	0
101	An Analytic Representation of the Second Symmetric Standard Elliptic Integral in Terms of Elementary Functions. Results in Mathematics, 2022, 77, .	0.4	0