JosÃ© Maria Grau

List of Publications by Year
in descending order

69	332	1040056 9	996975 15
papers	citations	h-index	g-index

69	69	69	255
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Exact Solution of the Environmental/Economic Dispatch Problem. IEEE Transactions on Power Systems, 2012, 27, 723-731.	6.5	53
2	A new formulation of the equivalent thermal in optimization of hydrothermal systems. Mathematical Problems in Engineering, 2002, 8, 181-196.	1.1	26
3	Mathematical modelling of the combined optimization of a pumped-storage hydro-plant and a wind park. Mathematical and Computer Modelling, 2013, 57, 2024-2028.	2.0	25
4	A comparative economic study of two configurations of hydro-wind power plants. Energy, 2016, 112, 8-16.	8.8	18
5	New developments on equivalent thermal in hydrothermal optimization: an algorithm of approximation. Journal of Computational and Applied Mathematics, 2005, 175, 63-75.	2.0	15
6	Initial guess of the solution of dynamic optimization of chemical processes. Journal of Mathematical Chemistry, 2010, 48, 28-37.	1.5	15
7	On the Structure of Quaternion Rings Over $${mathbb{Z}/nmathbb{Z}}$$ Z / n Z. Advances in Applied Clifford Algebras, 2015, 25, 875-887.	1.0	11
8	A Bolza problem in hydrothermal optimization. Applied Mathematics and Computation, 2007, 184, 12-22.	2.2	10
9	The Best-or-Worst and the Postdoc problems. Journal of Combinatorial Optimization, 2018, 35, 703-723.	1.3	10
10	A constrained and non-smooth hydrothermal problem. Applied Mathematics and Computation, 2009, 209, 10-18.	2.2	9
11	An analytic solution for some separable convex quadratic programming problems with equality and inequality constraints. Journal of Mathematical Inequalities, 2010, , 453-465.	0.9	8
12	Nonsmooth optimization of hydrothermal problems. Journal of Computational and Applied Mathematics, 2006, 192, 11-19.	2.0	7
13	An optimization problem in deregulated electricity markets solved with the nonsmooth maximum principle. International Journal of Computer Mathematics, 2009, 86, 237-249.	1.8	6
14	Optimal control of a linear unbranched chemical process with $$n$$ n steps: the quasi-analytical solution. Journal of Mathematical Chemistry, 2014, 52, 1036-1049.	1.5	6
15	An economic dispatch algorithm of combined cycle units. International Journal of Computer Mathematics, 2014, 91, 269-277.	1.8	6
16	The Best-or-Worst and the Postdoc problems with random number of candidates. Journal of Combinatorial Optimization, 2019, 38, 86-110.	1.3	6
17	New developments in the application of Pontryagin's Principle for the hydrothermal optimization. IMA Journal of Mathematical Control and Information, 2005, 22, 377-393.	1.7	5
18	Optimization of SO2 and NO x Emissions in Thermal Plants. Journal of Mathematical Chemistry, 2006, 40, 29-41.	1.5	5

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19	Cullen numbers with the Lehmer property. Proceedings of the American Mathematical Society, 2012, 140, 129-134.	0.8	5
20	On k-Lehmer Numbers. Integers, 2012, 12, .	0.3	5
21	An algorithm for bangâ€“bang control of fixed-head hydroplants. International Journal of Computer Mathematics, 2011, 88, 1949-1959.	1.8	4
22	An $ilde{O}(log^{2}(N))$ time primality test for generalized Cullen numbers. Mathematics of Computation, 2011, 80, 2315-2315.	2.1	4
23	Algorithm for calculating the analytic solution for economic dispatch with multiple fuel units. Computers and Mathematics With Applications, 2011, 62, 2225-2234.	2.7	4
24	Real-time optimization of wind farms and fixed-head pumped-storage hydro-plants. International Journal of Computer Mathematics, 2013, 90, 2147-2160.	1.8	4
25	On the congruence $$1^m + 2^m + cdots + m^mequiv n pmod {m}$$ 1 m + 2 m + â‹¯ + m m â‰¡ n (mod m) with $$nmid m$$ n â‰£ m. Monatshefte Fur Mathematik, 2015, 177, 421-436.	0.9	4
26	Solutions of the congruence. Mathematische Nachrichten, 2016, 289, 820-830.	0.8	4
27	Irreversible linear pathways in enzymatic reactions: analytical solution using the homotopy perturbation method. Journal of Mathematical Chemistry, 2020, 58, 273-291.	1.5	4
28	An environmentally constrained economic dispatch: CFBC boilers in the day-ahead market. International Journal of Computer Mathematics, 2008, 85, 345-358.	1.8	3
29	Generalized Quaternion Rings over $$mathbb {Z}/nmathbb {Z}$$ Z / n Z for an Odd $$varvec{n}$$ n. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	3
30	A new look at the returning secretary problem. Journal of Combinatorial Optimization, 2019, 37, 1216-1236.	1.3	3
31	An extension of the Last-Success-Problem. Statistics and Probability Letters, 2020, 156, 108591.	0.7	3
32	Influence of the elevation-storage curve in the optimization of hydroplants. International Journal for Simulation and Multidisciplinary Design Optimization, 2009, 3, 326-331.	1.1	3
33	A hydrothermal problem with non-smooth Lagrangian. Journal of Industrial and Management Optimization, 2014, 10, 761-776.	1.3	3
34	Counting invertible sums of squares modulo n and a new generalization of Euler's totient function. Publicationes Mathematicae, 2015, 87, 133-145.	0.2	3
35	An application of the algorithm of the cyclic coordinate descent in multidimensional optimization problems with constrained speed. Numerical Algorithms, 2009, 52, 129-149.	1.9	2
36	The explicit solution of the profit maximization problem with box-constrained inputs. Applied Mathematics and Computation, 2011, 217, 8705-8715.	2.2	2

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37	Optimization of a Pumped-Storage Fixed-Head Hydroplant: The Bang-Singular-Bang Solution. Mathematical Problems in Engineering, 2011, 2011, 1-11.	1.1	2
38	A quasi-linear algorithm for calculating the infimal convolution of convex quadratic functions. Journal of Computational and Applied Mathematics, 2012, 236, 2990-2997.	2.0	2
39	On a variant of Giuga numbers. Acta Mathematica Sinica, English Series, 2012, 28, 653-660.	0.6	2
40	A primality test for ??â¿+1 numbers. Mathematics of Computation, 2015, 84, 505-512.	2.1	2
41	A von Staudt-type result for $${sum _{zin mathbb {Z}_n[i]} z^k }$$ â^ z â^ Z n [i] z k. Monatshefte Fur Mathematik, 2015, 178, 345-359.	0.9	2
42	The operation of infimal/supremal convolution in mathematical economics. International Journal of Computer Mathematics, 2016, 93, 735-748.	1.8	2
43	On power sums of matrices over a finite commutative ring. International Journal of Algebra and Computation, 2017, 27, 547-560.	0.5	2
44	A Turn-Based Game Related to the Last-Success-Problem. Dynamic Games and Applications, 2020, 10, 836-844.	1.9	2
45	ON THE LAST DIGIT AND THE LAST NON-ZERO DIGIT OF nⁿIN BASE b. Bulletin of the Korean Mathematical Society, 2014, 51, 1325-1337.	0.3	2
46	The Cyclic Coordinate Descent in Hydrothermal Optimization Problems with Non-Regular Lagrangian. AIP Conference Proceedings, 2007, , .	0.4	1
47	Numerical approximation to ODEs using the error functional. Proceedings of the American Mathematical Society, 2012, 140, 4295-4308.	0.8	1
48	Cyclic coordinate descent in hydrothermal nonsmooth problems. Numerical Algorithms, 2012, 59, 227-247.	1.9	1
49	A comparison between a hydro-wind plant and wind speed forecasting using ARIMA models. , 2014, , .		1
50	Generalization of the Firmâ€™s Profit Maximization Problem: An Algorithm for the Analytical and Nonsmooth Solution. Computational Economics, 2014, 43, 1-14.	2.6	1
51	Fermat test with Gaussian base and Gaussian pseudoprimes. Czechoslovak Mathematical Journal, 2015, 65, 969-982.	0.3	1
52	Variations on Giuga Numbers and Giugaâ€™s Congruence. Ukrainian Mathematical Journal, 2016, 67, 1778-1785.	0.5	1
53	Power sums over finite commutative unital rings. Finite Fields and Their Applications, 2017, 48, 10-19.	1.0	1
54	On the Zero Divisor Graphs of the Ring of Lipschitz Integers Modulo n. Advances in Applied Clifford Algebras, 2017, 27, 1191-1202.	1.0	1

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55	The first Weierstrass-Erdmann condition in variational problems involving differential inclusions. Mathematical Inequalities and Applications, 2004, , 457-469.	0.2	1
56	An Optimal Control Technique for Solving Differential Equations. , 2009, , .		0
57	The analytic solution of the firm's cost-minimization problem with box constraints and the Cobb-Douglas model. , 2012, , .		0
58	An Exact Algorithm for the Continuous Quadratic Knapsack Problem via Infimal Convolution. Intelligent Systems Reference Library, 2013, , 97-127.	1.2	0
59	Corrigendum to â€œCullen numbers with the Lehmer propertyâ€• Proceedings of the American Mathematical Society, 2013, 141, 2941-2943.	0.8	0
60	A general algorithm for control problems with variable parameters and quasi-linear models. AIP Conference Proceedings, 2015, , .	0.4	0
61	CMMSE-17: general analytical laws for metabolic pathways. Journal of Mathematical Chemistry, 2018, 56, 1813-1825.	1.5	0
62	Optimal control of counter-terrorism tactics. Applied Mathematics and Computation, 2019, 347, 477-491.	2.2	0
63	Fast computation of the number of solutions to x12+â‹¯+xk2â‰¡Î»(modn). Journal of Number Theory, 2019, 200, 427-440.	0.4	0
64	Computational Approach for the Firmâ€™s Cost Minimization Problem Using the Selective Infimal Convolution Operator. Computational Economics, 2019, 54, 535-549.	2.6	0
65	Computing solutions to the congruence 1n+2n+â‹¯+nnâ‰¡p(modn). Discrete Applied Mathematics, 2020, 286, 3-9.	0.9	0
66	A primality test for $$4Kp^n-1$$ numbers. Monatshefte Fur Mathematik, 2020, 191, 93-101.	0.9	0
67	NEW DEVELOPMENTS ON EQUIVALENT THERMAL IN HYDROTHERMAL OPTIMIZATION.: AN ALGORITHM OF APPROXIMATION. , 2003, , .		0
68	An Optimal Stopping Problem for an Investing Firm. Economic Computation and Economic Cybernetics Studies and Research, 2020, 54, 65-78.	0.4	0
69	Counting non-isomorphic generalized Hamilton quaternions. International Electronic Journal of Algebra, 0, , 143-160.	1.1	0