Pedro Alonso

List of Publications by Year
in descending order

70 papers	459 citations	840776 11 h-index	888059 17 g-index
75 all docs	75 docs citations	75 times ranked	309 citing authors

#	Article	IF	Citations
1	Depth of almost strictly sign regular matrices. Mathematical Methods in the Applied Sciences, 2023, 46, 732-744.	2.3	0
2	Almost strictly sign regular rectangular matrices. Journal of Computational and Applied Mathematics, 2022, 404, 113121.	2.0	0
3	Convexity and level sets for interval-valued fuzzy sets. Fuzzy Optimization and Decision Making, 2022, 21, 553-580.	5.5	4
4	Are Secondary Mathematics Student Teachers Ready for the Profession? A Multi-actor Perspective on Mathematics Student Teachersâ€™ Mastery of Related Competences. Advances in Intelligent Systems and Computing, 2021, , 3-10.	0.6	2
5	Convexity of hesitant fuzzy sets based on aggregation functions. Computer Science and Information Systems, 2021, 18, 213-230.	1.0	1
6	Prospective Teachers Creating and Solving a Probability Problem: An Exploratory Study. Advances in Intelligent Systems and Computing, 2021, , 104-113.	0.6	1
7	A collection of efficient tools to work with almost strictly sign regular matrices. Computational and Mathematical Methods, 2021, 3, .	0.8	0
8	What Mathematical Knowledge Do Prospective Teachers Reveal When Creating and Solving a Probability Problem?. Mathematics, 2021, 9, 3300.	2.2	1
9	Algorithmic characterization of pentadiagonal ASSR matrices. International Journal of Computer Mathematics, 2020, 97, 431-443.	1.8	0
10	Orders Preserving Convexity Under Intersections for Interval-Valued Fuzzy Sets. Communications in Computer and Information Science, 2020, , 493-505.	0.5	0
11	Combined matrices of almost strictly sign regular matrices. Journal of Computational and Applied Mathematics, 2019, 354, 144-151.	2.0	6
12	Comparing pivoting strategies for almost strictly sign regular matrices. Journal of Computational and Applied Mathematics, 2019, 354, 96-102.	2.0	3
13	NoW Architectures, Dimensionality Reduction and Self-Organizing Maps for Information Retrieval. , 2019, , 110-113.		0
14	Exploring the Effectiveness of Video-Vignettes to Develop Mathematics Student Teachersâ€™ Feedback Competence. Eurasia Journal of Mathematics, Science and Technology Education, 2018, 14, .	1.3	9
15	Basic operations for fuzzy multisets. International Journal of Approximate Reasoning, 2018, 101, 107-118.	3.3	13
16	QR decomposition of almost strictly sign regular matrices. Journal of Computational and Applied Mathematics, 2017, 318, 646-657.	2.0	4
17	Monotonicity-based ranking on the basis of multiple partially specified reciprocal relations. Fuzzy Sets and Systems, 2017, 325, 69-96.	2.7	4
18	Monotonicity as a tool for differentiating between truth and optimality in the aggregation of rankings. Journal of Mathematical Psychology, 2017, 77, 1-9.	1.8	7

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19	Backward stability with almost strictly sign regular matrices. Journal of Computational and Applied Mathematics, 2017, 322, 71-80.	2.0	2
20	Monotonicity-based consensus states for the monometric rationalisation of ranking rules and how they are affected by ties. International Journal of Approximate Reasoning, 2017, 91, 131-151.	3.3	7
21	On cardinalities of finite interval-valued hesitant fuzzy sets. Information Sciences, 2017, 418-419, 421-431.	6.9	9
22	ASSR Matrices and Some Particular Cases. SEMA SIMAI Springer Series, 2017, , 235-240.	0.7	0
23	Fuzzy mathematical morphology for color images defined by fuzzy preference relations. Pattern Recognition, 2016, 60, 720-733.	8.1	21
24	A hybrid construction method based on weight functions to obtain intervalâ€valued fuzzy relations. Mathematical Methods in the Applied Sciences, 2016, 39, 4723-4735.	2.3	5
25	On Î´-Îµ-Partitions for Finite Interval-Valued Hesitant Fuzzy Sets. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 2016, 24, 145-163.	1.9	2
26	Almost strictly sign regular matrices and Neville elimination with two-determinant pivoting. Applied Mathematics and Computation, 2016, 289, 426-434.	2.2	3
27	Representations of votes facilitating monotonicity-based ranking rules: From votrix to votex. International Journal of Approximate Reasoning, 2016, 73, 87-107.	3.3	17
28	Applications of finite interval-valued hesitant fuzzy preference relations in group decision making. Information Sciences, 2016, 326, 89-101.	6.9	23
29	Washback Effect of University Entrance exams in Applied Mathematics to Social Sciences. PLoS ONE, 2016, 11, e0167544.	2.5	5
30	Medical Edge Detection Combining FuzzyÂMathematical Morphology withÂInterval-Valued Relations. Advances in Intelligent Systems and Computing, 2015, , 229-239.	0.6	1
31	Gray Scale Edge Detection using Interval-Valued Fuzzy Relations. International Journal of Computational Intelligence Systems, 2015, 8, 16.	2.7	5
32	Multi-factorial risk assessment: An approach based on fuzzy preference relations. Fuzzy Sets and Systems, 2015, 278, 67-80.	2.7	16
33	Protecting data: a fuzzy approach. International Journal of Computer Mathematics, 2015, 92, 1989-2000.	1.8	7
34	Ordering finitely generated sets and finite interval-valued hesitant fuzzy sets. Information Sciences, 2015, 325, 375-392.	6.9	14
35	Almost strictly totally negative matrices: An algorithmic characterization. Journal of Computational and Applied Mathematics, 2015, 275, 238-246.	2.0	5
36	Improving NNMFPACK with heterogeneous and efficient kernels for $$eta $$ Î² -divergence metrics. Journal of Supercomputing, 2015, 71, 1846-1856.	3.6	4

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37	An entropy measure definition for finite interval-valued hesitant fuzzy sets. Knowledge-Based Systems, 2015, 84, 121-133.	7.1	44
38	On the characterization of almost strictly sign regular matrices. Journal of Computational and Applied Mathematics, 2015, 275, 480-488.	2.0	16
39	On the use of fuzzy partitions to protect data. Integrated Computer-Aided Engineering, 2014, 21, 355-366.	4.6	15
40	Parallel approach to NNMF on multicore architecture. Journal of Supercomputing, 2014, 70, 564-576.	3.6	2
41	Non-linear parallel solver for detecting point sources in CMB maps using Bayesian techniques. Journal of Mathematical Chemistry, 2013, 51, 1153-1163.	1.5	6
42	New Optimization Techniques in Engineering. Mathematical Modelling and Algorithms, 2013, 12, 213-215.	0.5	1
43	A multicore solution to Blockâ€"Toeplitz linear systems of equations. Journal of Supercomputing, 2013, 65, 999-1009.	3.6	2
44	Conditioning and accurate computations with Pascal matrices. Journal of Computational and Applied Mathematics, 2013, 252, 21-26.	2.0	25
45	Computational and mathematical methods in science and engineering. International Journal of Computer Mathematics, 2012, 89, 1725-1727.	1.8	0
46	A note on matrices with maximal growth factor for Neville elimination. Journal of Computational and Applied Mathematics, 2012, 236, 2971-2974.	2.0	0
47	An efficient and scalable block parallel algorithm of Neville elimination as a tool for the CMB maps problem. Journal of Mathematical Chemistry, 2012, 50, 345-358.	1.5	3
48	Detecting point sources in CMB maps using an efficient parallel algorithm. Journal of Mathematical Chemistry, 2012, 50, 410-420.	1.5	4
49	Increasing data locality and introducing Level-3 BLAS in the Neville elimination. Applied Mathematics and Computation, 2011, 218, 3348-3358.	2.2	1
50	Neville elimination on multi- and many-core systems: OpenMP, MPI and CUDA. Journal of Supercomputing, 2011, 58, 215-225.	3.6	10
51	Growth factors of pivoting strategies associated with Neville elimination. Journal of Computational and Applied Mathematics, 2011, 235, 1755-1762.	2.0	10
52	TagRanker: learning to recommend ranked tags. Logic Journal of the IGPL, 2011, 19, 395-404.	1.5	4
53	Neville elimination: an efficient algorithm with application to chemistry. Journal of Mathematical Chemistry, 2010, 48, 3-20.	1.5	1
54	Mathematical and computational methods with applications in chemistry and physics. Journal of Mathematical Chemistry, 2010, 48, 95-97.	1.5	3

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55	A collection of examples where Neville elimination outperforms Gaussian elimination. Applied Mathematics and Computation, 2010, 216, 2525-2533.	2.2	7
56	Iterative refinement for Neville elimination. International Journal of Computer Mathematics, 2009, 86, 341-353.	1.8	5
57	Blocking Neville elimination algorithm for exploiting cache memories. Applied Mathematics and Computation, 2009, 209, 2-9.	2.2	9
58	Scalability of Neville elimination using checkerboard partitioning. International Journal of Computer Mathematics, 2008, 85, 309-317.	1.8	4
59	Analyzing Scalability of Neville Elimination. Journal of Mathematical Chemistry, 2006, 40, 49-61.	1.5	3
60	Neville elimination: a study of the efficiency using checkerboard partitioning. Linear Algebra and Its Applications, 2004, 393, 3-14.	0.9	6
61	Analyzing the Efficiency of Block-Cyclic Checkerboard Partitioning in Neville Elimination. Lecture Notes in Computer Science, 2004, , 963-968.	1.3	0
62	A Columnwise Block Striping in Neville Elimination. Lecture Notes in Computer Science, 2002, , 379-386.	1.3	2
63	A study of the performance of Neville elimination using two kinds of partitioning techniques. Linear Algebra and Its Applications, 2001, 332-334, 111-117.	0.9	7
64	Development of block and partitioned Neville elimination. Comptes Rendus Mathematique, 1999, 329, 1091-1096.	0.5	4
65	Block-Striped Partitioning and Neville Elimination. Lecture Notes in Computer Science, 1999, , 1073-1077.	1.3	5
66	Backward error analysis of Neville elimination. Applied Numerical Mathematics, 1997, 23, 193-204.	2.1	30
67	Parallel Neville elimination: A simple cost-optimal algorithm. , 0, , .		0
68	Developing and validating a competence framework for secondary mathematics student teachers through a Delphi method. Journal of Education for Teaching, 0, , 1-17.	2.0	17
69	Convexity of Interval-valued Fuzzy Sets Applied to Decision-Making Problems. , 0, , .		2
70	An axiomatic definition of cardinality for finite interval-valued hesitant fuzzy sets. , 0, , .		0