Juan C Pichel

List of Publications by Year
in descending order

34 papers	441 citations	932766 10 h-index	752256 20 g-index
35 all docs	35 docs citations	35 times ranked	440 citing authors

#	Article	IF	Citations
1	BigBWA: approaching the Burrowsâ€“Wheeler aligner to Big Data technologies. Bioinformatics, 2015, 31, 4003-4005.	1.8	107
2	SparkBWA: Speeding Up the Alignment of High-Throughput DNA Sequencing Data. PLoS ONE, 2016, 11, e0155461.	1.1	72
3	Image segmentation based on merging of sub-optimal segmentations. Pattern Recognition Letters, 2006, 27, 1105-1116.	2.6	49
4	Optimization of sparse matrixâ€“vector multiplication using reordering techniques on GPUs. Microprocessors and Microsystems, 2012, 36, 65-77.	1.8	39
5	Performance optimization of irregular codes based on the combination of reordering and blocking techniques. Parallel Computing, 2005, 31, 858-876.	1.3	21
6	Very Fast Tree: speeding up the estimation of phylogenies for large alignments through parallelization and vectorization strategies. Bioinformatics, 2020, 36, 4658-4659.	1.8	19
7	Reordering Algorithms for Increasing Locality on Multicore Processors. , 2008, , .		16
8	A Big Data Platform for Real Time Analysis of Signs of Depression in Social Media. International Journal of Environmental Research and Public Health, 2020, 17, 4752.	1.2	16
9	PASTASpark: multiple sequence alignment meets Big Data. Bioinformatics, 2017, 33, 2948-2950.	1.8	15
10	Sparse Matrix Classification on Imbalanced Datasets Using Convolutional Neural Networks. IEEE Access, 2019, 7, 82377-82389.	2.6	12
11	3DyRM: a dynamic roofline model including memory latency information. Journal of Supercomputing, 2014, 70, 696-708.	2.4	11
12	Sparse matrixâ€“vector multiplication on the Single-Chip Cloud Computer many-core processor. Journal of Parallel and Distributed Computing, 2013, 73, 1539-1550.	2.7	10
13	Data Locality Aware Strategy for Two-Phase CollectiveÂI/O. Lecture Notes in Computer Science, 2008, , 137-149.	1.0	8
14	A collective I/O implementation based on inspectorâ€“executor paradigm. Journal of Supercomputing, 2009, 47, 53-75.	2.4	7
15	Perldoop: Efficient execution of Perl scripts on Hadoop clusters. , 2014, , .		5
16	Analyzing the execution of sparse matrix-vector product on the Finisterrae SMP-NUMA system. Journal of Supercomputing, 2011, 58, 195-205.	2.4	4
17	Comparing Traditional and Neural Approaches for Detecting Health-Related Misinformation. Lecture Notes in Computer Science, 2021, , 78-90.	1.0	4
18	Exploiting data compression in collective I/O techniques. , 2008, , .		3

#	Article	IF	Citations
19	Perldoop2: A Big Data-Oriented Source-to-Source Perl-Java Compiler. , 2017, , .		3
20	Ignis: An efficient and scalable multi-language Big Data framework. Future Generation Computer Systems, 2020, 105, 705-716.	4.9	3
21	Reliability Prediction for Health-Related Content: A Replicability Study. Lecture Notes in Computer Science, 2021, , 47-61.	1.0	3
22	Hierarchically Tiled Array as a High-Level Abstraction for Codelets. , 2014, , .		2
23	Boosting performance of a Statistical Machine Translation system using dynamic parallelism. Journal of Computational Science, 2016, 13, 37-48.	1.5	2
24	A Micromodule Approach for Building Real-Time Systems with Python-Based Models: Application to Early Risk Detection of Depression on Social Media. Lecture Notes in Computer Science, 2018, , 801-805.	1.0	2
25	On the Influence of Thread Allocation for Irregular Codes in NUMA Systems. , 2009, , .		1
26	Hardware Counters Based Analysis of Memory Accesses in SMPs. , 2012, , .		1
27	Experiences with the Sparse Matrix-Vector Multiplication on a Many-core Processor. , 2012, , .		1
28	A flexible and dynamic page migration infrastructure based on hardware counters. Journal of Supercomputing, 2013, 65, 930-948.	2.4	1
29	A hardware counterâ€based toolkit for the analysis of memory accesses in SMPs. Concurrency Computation Practice and Experience, 2014, 26, 1328-1341.	1.4	1
30	Using sampled information: is it enough for the sparse matrixâ€“vector product locality optimization?. Concurrency Computation Practice and Experience, 2014, 26, 98-117.	1.4	1
31	A unified framework to improve the interoperability between HPC and Big Data languages and programming models. Future Generation Computer Systems, 2022, 134, 123-139.	4.9	1
32	Lessons Learnt Porting Parallelisation Techniques for Irregular Codes to NUMA Systems. , 2010, , .		0
33	Building Python-Based Topologies for Massive Processing of Social Media Data in Real Time. , 2018, , .		0
34	Real-Time Focused Extraction of Social Media Users. IEEE Access, 2022, 10, 42607-42622.	2.6	0