

# Vipin Chaudhary

## List of Publications by Year in descending order

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Version: 2024-02-01

121  
papers

1,801  
citations

394286

19  
h-index

454834

30  
g-index

127  
all docs

127  
docs citations

127  
times ranked

1578  
citing authors

#	ARTICLE	IF	CITATIONS
1	History-based access control for mobile code. , 1998, , .		88
2	Labeling of Lumbar Discs Using Both Pixel- and Object-Level Features With a Two-Level Probabilistic Model. IEEE Transactions on Medical Imaging, 2011, 30, 1-10.	5.4	85
3	A generalized scheme for mapping parallel algorithms. IEEE Transactions on Parallel and Distributed Systems, 1993, 4, 328-346.	4.0	84
4	Intraoperative brain shift prediction using a 3D inhomogeneous patient-specific finite element model. Journal of Neurosurgery, 2007, 106, 164-169.	0.9	78
5	A Comparison of Virtualization Technologies for HPC. , 2008, , .		66
6	Lumbar Disc Localization and Labeling with a Probabilistic Model on Both Pixel and Object Features. Lecture Notes in Computer Science, 2008, 11, 202-210.	1.0	63
7	A Robust Iris Localization Method Using an Active Contour Model and Hough Transform. , 2010, , .		60
8	Intervertebral disc detection in X-ray images using faster R-CNN. , 2017, 2017, 564-567.		53
9	VMeter: Power modelling for virtualized clouds. , 2010, , .		49
10	Computer-aided diagnosis of lumbar disc pathology from clinical lower spine MRI. International Journal of Computer Assisted Radiology and Surgery, 2010, 5, 287-293.	1.7	46
11	Supervised methods for detection and segmentation of tissues in clinical lumbar MRI. Computerized Medical Imaging and Graphics, 2014, 38, 639-649.	3.5	41
12	Utilizing OFDM Guard Interval for Spectrum Sensing. , 2007, , .		38
13	Evaluating the use of GPUs in liver image segmentation and HMMER database searches. , 2009, , .		38
14	XtremeData dbX: An FPGA-Based Data Warehouse Appliance. Computing in Science and Engineering, 2010, 12, 66-73.	1.2	36
15	Toward a clinical lumbar CAD: herniation diagnosis. International Journal of Computer Assisted Radiology and Surgery, 2011, 6, 119-126.	1.7	35
16	Compression fracture diagnosis in lumbar: a clinical CAD system. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 461-469.	1.7	35
17	Automatic lumbar vertebra segmentation from clinical CT for wedge compression fracture diagnosis. Proceedings of SPIE, 2011, , .	0.8	34
18	An automatic segmentation method of the spinal canal from clinical MR images based on an attention model and an active contour model. , 2011, , .		34

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19	Eighth to sixteenth virial coefficients of the Lennard-Jones model. Journal of Chemical Physics, 2015, 143, 044504.	1.2	33
20	Single pulse excimer laser nanostructuring of thin silicon films: Nanosharp cones formation and a heat transfer problem. Journal of Applied Physics, 2007, 101, 094301.	1.1	31
21	Mayer Sampling Monte Carlo calculation of virial coefficients on graphics processors. Molecular Physics, 2013, 111, 535-543.	0.8	28
22	Extracting chemical-protein relations using attention-based neural networks. Database: the Journal of Biological Databases and Curation, 2018, 2018, .	1.4	27
23	Content based sub-image retrieval system for high resolution pathology images using salient interest points. , 2009, 2009, 3719-22.		26
24	Composite features for automatic diagnosis of intervertebral disc herniation from lumbar MRI. , 2011, 2011, 5068-71.		25
25	History-Based Access Control for Mobile Code. Lecture Notes in Computer Science, 1999, , 413-431.	1.0	25
26	Computer-aided diagnosis for lumbar mri using heterogeneous classifiers. , 2011, , .		24
27	MPI-HMMER-Boost: Distributed FPGA Acceleration. Journal of Signal Processing Systems, 2007, 48, 223-238.	1.0	21
28	Automatic diagnosis of lumbar disc herniation with shape and appearance features from MRI. Proceedings of SPIE, 2010, , .	0.8	21
29	A High-Performance Heterogeneous Computing Platform for Biological Sequence Analysis. IEEE Transactions on Parallel and Distributed Systems, 2010, 21, 1267-1280.	4.0	21
30	Lumbar Spine Disc Herniation Diagnosis with a Joint Shape Model. Lecture Notes in Computational Vision and Biomechanics, 2014, , 87-98.	0.5	21
31	Context sensitive labeling of spinal structure in MR images. Proceedings of SPIE, 2009, , .	0.8	20
32	Application-Level Checkpointing Techniques for Parallel Programs. Lecture Notes in Computer Science, 2006, , 221-234.	1.0	20
33	Time stamp algorithms for runtime parallelization of DOACROSS loops with dynamic dependences. IEEE Transactions on Parallel and Distributed Systems, 2001, 12, 433-450.	4.0	19
34	Segmentation of the Liver from Abdominal CT Using Markov Random Field Model and GVF Snakes. , 2008, , .		19
35	A new approach to automatic disc localization in clinical lumbar MRI: Combining machine learning with heuristics. , 2012, , .		19
36	Automatic segmentation of the spinal cord and the dural sac in lumbar MR images using gradient vector flow field. , 2010, 2010, 3117-20.		18

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37	Disc herniation diagnosis in MRI using a CAD framework and a two-level classifier. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 861-869.	1.7	18
38	Desiccation diagnosis in lumbar discs from clinical MRI with a probabilistic model. , 2009, , .		17
39	A fault-tolerant strategy for virtualized HPC clusters. Journal of Supercomputing, 2009, 50, 209-239.	2.4	15
40	Pareto-based interval type-2 fuzzy c-means with multi-scale JND color histogram for image segmentation. , 2018, 76, 75-83.		15
41	Rack aware scheduling in HPC data centers: an energy conservation strategy. Cluster Computing, 2013, 16, 559-573.	3.5	13
42	Parallel molecular dynamics simulations of alkane/hydroxylated $\alpha$ -aluminum oxide interfaces. Computer Physics Communications, 2000, 128, 210-218.	3.0	12
43	Unique Sets Oriented Parallelization of Loops with Non-uniform Dependences. Computer Journal, 1997, 40, 322-339.	1.5	11
44	Automated segmentation of stromal tissue in histology images using a voting Bayesian model. Signal, Image and Video Processing, 2013, 7, 1229-1237.	1.7	11
45	Comparing the performance of clusters, Hadoop, and Active Disks on microarray correlation computations. , 2009, , .		10
46	Rack Aware Scheduling in HPC Data Centers: An Energy Conservation Strategy. , 2011, , .		10
47	Segmentation and localisation of whole slide images using unsupervised learning. IET Image Processing, 2013, 7, 464-471.	1.4	10
48	Fast scale-invariant lateral lumbar vertebrae detection and segmentation in X-ray images. , 2016, 2016, 1054-1057.		10
49	Adaptive Secure Access to Remote Services in Mobile Environments. IEEE Transactions on Services Computing, 2008, 1, 49-61.	3.2	9
50	Segmentation of lumbar vertebrae from clinical CT using active shape models and GVF-snake. , 2011, 2011, 8033-6.		9
51	Automatic spinal canal detection in lumbar MR images in the sagittal view using dynamic programming. Computerized Medical Imaging and Graphics, 2014, 38, 569-579.	3.5	9
52	Vertebral Column Localization, Labeling, and Segmentation. Lecture Notes in Computational Vision and Biomechanics, 2015, , 193-229.	0.5	9
53	Improving MPI-HMMER's scalability with parallel I/O. , 2009, , .		8
54	Computer aided diagnosis system for lumbar spine. , 2011, , .		8

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55	A Supervised Approach Towards Segmentation of Clinical MRI for Automatic Lumbar Diagnosis. Lecture Notes in Computational Vision and Biomechanics, 2014, , 185-195.	0.5	8
56	COMPILE TIME PARTITIONING OF NESTED LOOP ITERATION SPACES WITH NON-UNIFORM DEPENDENCES*. International Journal of Parallel, Emergent and Distributed Systems, 1997, 12, 113-141.	0.4	7
57	Antisocial Behavior of Agents in Scheduling Mechanisms. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2007, 37, 946-954.	3.4	7
58	Localization of tissues in high-resolution digital anatomic pathology images. , 2009, , .		7
59	Automating proliferation rate estimation from Ki-67 histology images. Proceedings of SPIE, 2012, , .	0.8	7
60	MayoNLP at SemEval 2017 Task 10: Word Embedding Distance Pattern for Keyphrase Classification in Scientific Publications. , 2017, , .		7
61	Title is missing!. Cluster Computing, 1999, 2, 177-186.	3.5	6
62	Bio-sequence analysis with cradle's 3SoC#8482; software scalable system on chip. , 2004, , .		6
63	Optimised fine and coarse parallelism for sequence homology search. International Journal of Bioinformatics Research and Applications, 2006, 2, 430.	0.1	6
64	Towards Ubiquitous Access of Computer-Assisted Surgery Systems. , 2006, 2006, 4428-31.		6
65	Boosting data throughput for sequence database similarity searches on FPGAs using an adaptive buffering scheme. Parallel Computing, 2009, 35, 1-11.	1.3	6
66	Lumbar spinal stenosis CAD from clinical MRM and MRI based on inter- and intra-context features with a two-level classifier. Proceedings of SPIE, 2011, , .	0.8	6
67	A Topic-modeling Based Framework for Drug-drug Interaction Classification from Biomedical Text. AMIA ... Annual Symposium proceedings, 2016, 2016, 789-798.	0.2	6
68	A Comparative Study of Star Graphs and Rotator Graphs. , 1994, , .		5
69	CASMIL: a comprehensive software/toolkit for image-guided neurosurgeries. International Journal of Medical Robotics and Computer Assisted Surgery, 2006, 2, 123-138.	1.2	5
70	Diagnosis of disc herniation based on classifiers and features generated from spine MR images. Proceedings of SPIE, 2010, , .	0.8	5
71	A virtual interactive navigation system for orthopaedic surgical interventions. , 2011, , .		5
72	SymSig: A low latency interconnection topology for HPC clusters. , 2013, , .		5

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73	On Improving serviceability with quantified dynamic spectrum access. , 2014, , .		5
74	Feeding Deterrence Effects of Defatted Jojoba ( <i>Simmondsia chinensis</i> ) Meal Against Indian Gerbil, <i>Tatera indica</i> (Hardwicke). Proceedings of the National Academy of Sciences India Section B - Biological Sciences, 2017, 87, 663-670.	0.4	5
75	A Scalable Asynchronous Replication-Based Strategy for Fault Tolerant MPI Applications. , 2007, , 257-268.		5
76	On Improving Thread Migration: Safety and Performance. Lecture Notes in Computer Science, 2002, , 474-485.	1.0	5
77	Parallel image component labeling for target acquisition. Optical Engineering, 1998, 37, 2078.	0.5	4
78	Adaptation point analysis for computation migration/checkpointing. , 2005, , .		4
79	Automated boundary extraction of the spinal canal in mri based on dynamic programming. , 2012, 2012, 6559-62.		4
80	Integrating data and compute-intensive workflows for uncertainty quantification in large-scale simulation: application to model-based hazard analysis. International Journal of Computer Mathematics, 2014, 91, 730-747.	1.0	4
81	Parallel Implementations of Local Sequence Alignment: Hardware and Software. , 2005, , 233-264.		3
82	Adaptive Secure Access to Remote Services. , 2008, , .		3
83	Design of a benchmark dataset, similarity metrics, and tools for liver segmentation. , 2008, , .		3
84	Listen-While-Talking: A Technique for Primary User Protection. , 2009, , .		3
85	Local binary patterns for stromal area removal in histology images. Proceedings of SPIE, 2012, , .	0.8	3
86	The Influence of Sample Reconstruction on Stock Trend Prediction via NARX Neural Network. , 2015, , .		3
87	Bio-efficacy of denatonium benzoate added formulation of bromadiolone against commensal rodents. Crop Protection, 2016, 80, 132-137.	1.0	3
88	Correlating Lab Test Results in Clinical Notes with Structured Lab Data: A Case Study in HbA1c and Glucose. AMIA Summits on Translational Science Proceedings, 2017, 2017, 221-228.	0.4	3
89	On Implementation of MPEG-2 Like Real-Time Parallel Media Applications on MDSP SoC Cradle Architecture. Lecture Notes in Computer Science, 2004, , 281-290.	1.0	2
90	Experiments with Parallelizing Tribology Simulations. Journal of Supercomputing, 2004, 28, 323-343.	2.4	2

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91	An adaptive data prefetching scheme for biosequence database search on reconfigurable platforms. , 2007, , .		2
92	Fast Quantitative Analysis of Stock Trading Points in Dual Period of DMAC. , 2015, , .		2
93	Towards Performant Workflows, Monitoring and Measuring. , 2020, , .		2
94	<b>Distribution and population of Himalayan Marmot </b><i>Marmota himalayana</i> (Hodgson, 1841) (Mammalia: Rodentia: Sciuridae) in Leh-Ladakh, Jammu & Kashmir, India</b>. Journal of Threatened Taxa, 2017, 9, 10886.	0.1	2
95	Broad Learning-based Intervertebral Discs Localization and Segmentation. , 2019, , .		2
96	Optimized Cluster-Enabled HMMER Searches. , 0, , 51-70.		1
97	Enhancing regional lymph nodes from endoscopic ultrasound images. , 2008, , .		1
98	A fully automated method of associating axial slices with a disc based on labeling of multi-protocol lumbar MRI. , 2010, , .		1
99	Exploring the utility of axial lumbar MRI for automatic diagnosis of intervertebral disc abnormalities. , 2013, , .		1
100	Estimating the use of spectrum for defining and enforcing the spectrum access rights. , 2015, , .		1
101	Spot counting on fluorescence in situ hybridization in suspension images using Gaussian mixture model. , 2015, , .		1
102	Characterization of the missed spectrum-access opportunities under dynamic spectrum sharing. , 2016, , .		1
103	MUSE: A Methodology for Quantifying Spectrum Usage. , 2016, , .		1
104	Cider: A Case for Block Level Variable Redundancy on a Distributed Flash Array. , 2017, , .		1
105	Thread Migration/Checkpointing for Type-Unsafe C Programs. Lecture Notes in Computer Science, 2003, , 469-479.	1.0	1
106	A Fission Technique Enabling Parallelization of Imperfectly Nested Loops. Lecture Notes in Computer Science, 1999, , 87-94.	1.0	0
107	Data Conversion for Heterogeneous Migration/Checkpointing. , 2006, , 241-260.		0
108	OpenMP for Chip Multiprocessors. , 2006, , 117-134.		0

#	ARTICLE	IF	CITATIONS
109	Simulation tools to study a distributed shared memory for clusters of symmetric multiprocessors. Future Generation Computer Systems, 2006, 22, 57-66.	4.9	0
110	Editorial. Computer Methods and Programs in Biomedicine, 2010, 98, 221-222.	2.6	0
111	Large data and computation in a hazard map workflow using Hadoop and Netezza architectures. , 2013, , .		0
112	Mixed-precision models for calculation of high-order virial coefficients on GPUs. , 2014, , .		0
113	LabLinker: Finding Links of Laboratory Test Results between Structured Records and Clinical Notes. , 2016, , .		0
114	Towards an affordable deep learning system: automated intervertebral disc detection in x-ray images. , 2017, , .		0
115	Population growth potential of <i>Epilachna vigintioctopunctata</i> (F.) (Coleoptera: Coccinellidae) on some solanaceous medicinal plants. International Journal of Pest Management, 2017, 63, 82-91.	0.9	0
116	TST: An Effective Approach to Extract Trend Feature in Stock Time Series. , 2018, , .		0
117	Exploring Scalable Computing Architectures for Interactions Analysis. , 2018, , .		0
118	Special Issue on Healthcare Knowledge Discovery and Management. Journal of Healthcare Informatics Research, 2019, 3, 157-158.	5.3	0
119	Parallel manipulations of octrees and quadtrees. Lecture Notes in Computer Science, 1992, , 69-86.	1.0	0
120	MANIPULATION OF OCTREES AND QUADTREES ON MULTIPROCESSORS. Series in Machine Perception and Artificial Intelligence, 1994, , 25-41.	0.1	0
121	Web-Based Architecture to Enable Compute-Intensive CAD Tools and Multi-user Synchronization in Teleradiology. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2008, , 186-190.	0.2	0