Zhihui Du

List of Publications by Citations

117 papers	14,533 citations	28 h-index	120 g-index
152 ext. papers	17,653 ext. citations	3.7 avg, IF	5.39 L-index

#	Paper	IF	Citations
117	Observation of Gravitational Waves from a Binary Black Hole Merger. *Physical Review Letters*, **2016**, 116, 061102	7.4	6108
116	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. *Physical Review Letters*, **2017**, 118, 221101	7.4	1609
115	Advanced LIGO. *Classical and Quantum Gravity*, **2015**, 32, 074001	3.3	1098
114	Tests of General Relativity with GW150914. *Physical Review Letters*, **2016**, 116, 221101	7.4	837
113	Characterization of the LIGO detectors during their sixth science run. *Classical and Quantum Gravity*, **2015**, 32, 115012	3.3	790
112	A gravitational wave observatory operating beyond the quantum shot-noise limit. *Nature Physics*, **2011**, 7, 962-965	16.2	554
111	Properties of the Binary Black Hole Merger GW150914. *Physical Review Letters*, **2016**, 116, 241102	7.4	515
110	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. *Astrophysical Journal Letters*, **2016**, 818, L22	7.9	512
109	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. *Physical Review Letters*, **2016**, 116, 131103	7.4	328
108	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. *Physical Review D*, **2016**, 93,	4.9	253
107	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. *Physical Review Letters*, **2016**, 116, 131102	7.4	188
106	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. *Astrophysical Journal Letters*, **2016**, 826, L13	7.9	183
105	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. *Classical and Quantum Gravity*, **2016**, 33,	3.3	155
104	Robot as a Service in Cloud Computing **2010**,		112
103	Observing gravitational-wave transient GW150914 with minimal assumptions. *Physical Review D*, **2016**, 93,	4.9	94
102	High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube. *Physical Review D*, **2016**, 93,	4.9	80
101	Effects of waveform model systematics on the interpretation of GW150914. *Classical and Quantum Gravity*, **2017**, 34, 104002	3.3	74

100	Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data. *Physical Review Letters*, **2014**, 113, 231101	7.4	74
99	. *IEEE Transactions on Parallel and Distributed Systems*, **2017**, 28, 2674-2688	3.7	63
98	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. *Astrophysical Journal*, **2015**, 813, 39	4.7	58
97	First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. *Physical Review D*, **2017**, 96,	4.9	54
96	Robot Cloud: Bridging the power of robotics and cloud computing. *Future Generation Computer Systems*, **2017**, 74, 337-348	7.5	51
95	Virtualization-based autonomic resource management for multi-tier Web applications in shared data center. *Journal of Systems and Software*, **2008**, 81, 1591-1608	3.3	50
94	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. *Physical Review D*, **2017**, 96,	4.9	39
93	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. *Physical Review D*, **2015**, 91,	4.9	38
92	SUPPLEMENT: LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914 (2016, ApJL, 826, L13). *Astrophysical Journal, Supplement Series*, **2016**, 225, 8	8	38
91	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. *Physical Review D*, **2015**, 91,	4.9	32
90	First low frequency all-sky search for continuous gravitational wave signals. *Physical Review D*, **2016**, 93,	4.9	29
89	All-sky search for long-duration gravitational wave transients with initial LIGO. *Physical Review D*, **2016**, 93,	4.9	27
88	Design of a Robot Cloud Center **2011**,		27
87	Searching for stochastic gravitational waves using data from the two colocated LIGO Hanford detectors. *Physical Review D*, **2015**, 91,	4.9	26
86	Scalable Data Storage Design for Nonstationary IoT Environment With Adaptive Security and Reliability. *IEEE Internet of Things Journal*, **2020**, 7, 10171-10188	10.7	25
85	Enabling an Anatomic View to Investigate Honeypot Systems: A Survey. *IEEE Systems Journal*, **2018**, 12, 3906-3919	4.3	24
84	New techniques for mining frequent patterns in unordered trees. *IEEE Transactions on Cybernetics*, **2015**, 45, 1113-25	10.2	22
83	An adaptive model-free resource and power management approach for multi-tier cloud environments. *Journal of Systems and Software*, **2012**, 85, 1135-1146	3.3	21

82	A green-aware virtual machine migration strategy for sustainable datacenter powered by renewable energy. *Simulation Modelling Practice and Theory*, **2015**, 58, 3-14	3.9	20
81	An autonomic provisioning framework for outsourcing data center based on virtual appliances. *Cluster Computing*, **2008**, 11, 229-245	2.1	18
80	Typical Virtual Appliances: An optimized mechanism for virtual appliances provisioning and management. *Journal of Systems and Software*, **2011**, 84, 377-387	3.3	17
79	A Waterfall Model to Achieve Energy Efficient Tasks Mapping for Large Scale GPU Clusters **2011**,		15
78	WEC: Improving Durability of SSD Cache Drives by Caching Write-Efficient Data. *IEEE Transactions on Computers*, **2015**, 64, 3304-3316	2.5	14
77	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. *Physical Review D*, **2016**, 93,	4.9	14
76	HoneyDOC: An Efficient Honeypot Architecture Enabling All-Round Design. *IEEE Journal on Selected Areas in Communications*, **2019**, 37, 683-697	14.2	13
75	Versatile virtual honeynet management framework. *IET Information Security*, **2017**, 11, 38-45	1.4	12
74	Experimental Analysis of Secret Sharing Schemes for Cloud Storage Based on RNS. *Communications in Computer and Information Science*, **2018**, 370-383	0.3	11
73	Optimized QoS-aware replica placement heuristics and applications in astronomy data grid. *Journal of Systems and Software*, **2011**, 84, 1224-1232	3.3	11
72	GPU-accelerated low-latency real-time searches for gravitational waves from compact binary coalescence. *Classical and Quantum Gravity*, **2012**, 29, 235018	3.3	11
71	Search for transient gravitational waves in coincidence with short-duration radio transients during 2007Ø2013. *Physical Review D*, **2016**, 93,	4.9	10
70	A new parallelization scheme for adaptive mesh refinement. *Journal of Computational Science*, **2016**, 16, 79-88	3.4	10
69	Efficient Data Migration to Conserve Energy in Streaming Media Storage Systems. *IEEE Transactions on Parallel and Distributed Systems*, **2012**, 23, 2081-2093	3.7	10
68	Taxonomy of honeynet solutions **2015**,		9
67	GPU-acceleration on a low-latency binary-coalescence gravitational wave search pipeline. *Computer Physics Communications*, **2018**, 231, 62-71	4.2	9
66	GPU-assisted hybrid network traffic model **2014**,		7
65			7

64	Energy-Efficient Scheduling for Best-Effort Interactive Services to Achieve High Response Quality **2013**,		5
63	BigDataBench-S: An Open-Source Scientific Big Data Benchmark Suite **2017**,		5
62	Real-Time Anomaly Detection of Short-Time-Scale GWAC Survey Light Curves **2017**,		5
61	Modeling the learning behaviors of massive open online courses **2015**,		5
60	V3COCA: An effective clustering algorithm for complicated objects and its application in breast cancer research and diagnosis. *Simulation Modelling Practice and Theory*, **2009**, 17, 454-470	3.9	5
59	The Triangular Pyramid Scheduling Model and algorithm for PDES in Grid. *Simulation Modelling Practice and Theory*, **2009**, 17, 1678-1689	3.9	5
58	A content and user-oblivious video-recommendation algorithm. *Simulation Modelling Practice and Theory*, **2011**, 19, 1895-1912	3.9	5
57	Gravitational wave astrophysics, data analysis and multimessenger astronomy. *Science China: Physics, Mechanics and Astronomy*, **2015**, 58, 1	3.6	4
56	QoS Enhancement for PDES Grid Based on Time Series Prediction **2007**,		4
55	Adaptive and Flexible Virtual Honeynet. *Lecture Notes in Computer Science*, **2015**, 1-17	0.9	4
54	Modeling the Power Variability of Core Speed Scaling on Homogeneous Multicore Systems. *Scientific Programming*, **2017**, 2017, 1-13	1.4	3
53	A simulation cloud monitoring framework and its evaluation model. *Simulation Modelling Practice and Theory*, **2013**, 38, 20-37	3.9	3
52	Efficient Particle-mesh Spreading on GPUs. *Procedia Computer Science*, **2015**, 51, 120-129	1.6	3
51	Priori information and sliding window based prediction algorithm for energy-efficient storage systems in cloud. *Simulation Modelling Practice and Theory*, **2013**, 39, 3-19	3.9	3
50	Research on Adaptive QoS-Aware Resource Reservation Management in Cloud Service Environments **2011**,		3
49	A stepwise optimization algorithm of clustered streaming media servers. *Journal of Systems and Software*, **2009**, 82, 1344-1361	3.3	3
48	A Partition-Merge Based Cache-Conscious Parallel Sorting Algorithm for CMP with Shared Cache **2009**,		3
47	Modeling and Simulation of Virtualized Autonomic Service Centers. *Simulation*, **2008**, 84, 119-136	1.2	3

46	A SOA Based Pipeline System to Deal with Astronomy Telescope Data **2006**,		3
45	Dynamic Service Composition Based on Peer-to-Peer Network **2006**,		3
44	Measurement of the fine structure factors and extinction distance by convergent-beam electron diffraction in Co3Ti with and without B doping. *Journal of Applied Crystallography*, **2000**, 33, 1119-1121	3.8	3
43	Measurement of Debye-Waller factors in Co3Ti by quantitative CBED. *Acta Crystallographica Section A: Foundations and Advances*, **2000**, 56 (Pt 2), 189-92		3
42	A New Parallel Method for Binary Black Hole Simulations. *Scientific Programming*, **2016**, 2016, 1-14	1.4	3
41	Energy Consumption and Quality of Service Optimization in Containerized Cloud Computing **2018**,		3
40	Analysis of secured distributed cloud data storage based on multilevel RNS **2018**,		2
39	Self-adaptive QoS-aware resource allocation and reservation management in virtualised environments. *International Journal of Computational Science and Engineering*, **2012**, 7, 308	0.4	2
38	SOAVM: A Service-Oriented Virtualization Management System with Automated Configuration **2008**,		2
37	Dynamic Dataflow Driven Service Composition Mechanism for Astronomy Data Processing **2007**,		2
36	A Service Level QoS Mechanism and Algorithm for Data Distribution and Backup in an Grid Based Astronomy Data Management System **2007**,		2
35	A Pipeline Virtual Service Pre-Scheduling Pattern and its Application in Astronomy Data Processing. *Simulation*, **2007**, 83, 123-132	1.2	2
34			2
33	SPIIR online coherent pipeline to search for gravitational waves from compact binary coalescences. *Physical Review D*, **2022**, 105,	4.9	2
32	Numerical relativity and gravitational wave astronomy. *Scientia Sinica: Physica, Mechanica Et Astronomica*, **2017**, 47, 010405	1.5	2
31	Site preferences of alloying transition metal elements in Ni-based superalloy: A first-principles study. *Chinese Physics B*, **2018**, 27, 097102	1.2	2
30	A Smart Visual Analysis Solution for MOOC Data **2017**,		1
29	An adaptive QoS management framework for VoD cloud service centers **2010**,		1

28	A tile-based parallel Viterbi algorithm for biological sequence alignment on GPU with CUDA **2010**,		1
27	Design and implementation of adaptive resource co-allocation approaches for cloud service environments **2010**,		1
26	On accelerating iterative algorithms with CUDA: A case study on Conditional Random Fields training algorithm for biological sequence alignment **2010**,		1
25	Optimizing Message Passing Programs Based on Task Section Duplication **2009**,		1
24	A Prediction Based CMP Cache Migration Policy **2008**,		1
23	Research and Application on Virtualization Service Oriented Infrastructure for Networkitized M&S **2008**,		1
22	The Dynamic Priority Based Scheduling Algorithm for Hard Real-Time Heterogeneous Cmp Application. *Journal of Algorithms and Computational Technology*, **2008**, 2, 409-427	0.7	1
21	A User Satisfaction Level Based Multi-objective Optimization Method for Grid Task Scheduling **2006**,		1
20	A WS-inspection based decentralized service discovery service in OGSA		1
19	AstroServ: A Distributed Database for Serving Large-Scale Full Life-Cycle Astronomical Data. *Lecture Notes in Computer Science*, **2019**, 44-55	0.9	1
18	Short-Timescale Gravitational Microlensing Events Prediction with ARIMA-LSTM and ARIMA-GRU Hybrid Model. *Lecture Notes in Computer Science*, **2019**, 224-238	0.9	1
17	E-Zone: A Faster Neighbor Point Query Algorithm for Matching Spacial Objects. *Lecture Notes in Computer Science*, **2018**, 473-479	0.9	1
16	Discovering frequent induced subgraphs from directed networks. *Intelligent Data Analysis*, **2018**, 22, 1279-1296	1.1	1
15	Program power profiling based on phase behaviors. *Sustainable Computing: Informatics and Systems*, **2018**, 19, 341-350	3	1
14	QoS-Aware and Fault-Tolerant Replica Placement. *Lecture Notes in Computer Science*, **2020**, 157-172	0.9	0
13	Dynamic Hybrid Honeypot System Based Transparent Traffic Redirection Mechanism. *Lecture Notes in Computer Science*, **2016**, 311-319	0.9	0
12	NFD: Toward Real-time Mining of Short-timescale Gravitational Microlensing Events. *Publications of the Astronomical Society of the Pacific*, **2018**, 130, 104504	5	0
11	Interactive Graph Stream Analytics in Arkouda. *Algorithms*, **2021**, 14, 221	1.8	0

10	Resource Management in Virtualized Clouds. *Scientific Programming*, **2016**, 2016, 1-2	1.4
9	Investigating the Statistical Distribution of Learning Coverage in MOOCs. *Information (Switzerland)*, **2017**, 8, 150	2.6
8	Club theory of the Grid. *Concurrency Computation Practice and Experience*, **2006**, 18, 1759-1773	1.4
7	Optimizing Service Data Transmission in an OGSA Based Grid System. *Journal of Algorithms and Computational Technology*, **2007**, 1, 251-272	0.7
6	Data Management in Time-Domain Astronomy: Requirements and Challenges. *Lecture Notes in Computer Science*, **2019**, 32-43	0.9
5	An Efficient Parallel Framework to Analyze Astronomical Sky Survey Data. *Lecture Notes in Computer Science*, **2019**, 67-77	0.9
4	A Frequency Scaling Based Performance Indicator Framework for Big Data Systems. *Lecture Notes in Computer Science*, **2019**, 19-35	0.9
3	Adaptive Resource Management in Grid Environment **2009**, 109-117	
2	QoS in Grid Computing **2009**, 75-83	
1	Online Random Seeking in FLV Video Based on File Cutting. *Advances in Intelligent Systems and Computing*, **2013**, 679-688	0.4