

# Marlon E Pierce

## List of Publications by Year in descending order

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182  
papers

2,022  
citations

331538

21  
h-index

414303

32  
g-index

186  
all docs

186  
docs citations

186  
times ranked

1515  
citing authors

#	ARTICLE	IF	CITATIONS
1	Custos Secrets: a Service for Managing User-Provided Resource Credential Secrets for Science Gateways. , 2022, , .		1
2	Building the RNAMake Gateway on PATH: a Student-Led Design Project. , 2022, , .		0
3	SimVascular Gateway for Education and Research. , 2022, , .		0
4	User-Centric Design and Evolvable Architecture for Science Gateways: A Case Study. , 2021, , .		1
5	Common Resource Descriptions for Interoperable Gateway Cyberinfrastructure. , 2021, , .		0
6	Jetstream2: Accelerating cloud computing via Jetstream. , 2021, , .		15
7	Buried Aseismic Slip and Off-Fault Deformation on the Southernmost San Andreas Fault Triggered by the 2010 El Mayor Cucapah Earthquake Revealed by UAVSAR. Earth and Space Science, 2021, 8, e2021EA001682.	1.1	1
8	Integrating Hydrologic Models and Earth Observation Data for Global Flood Forecasting and Alerting in Near Real-Time. , 2021, , .		1
9	Clustering Analysis Methods for GNSS Observations: A Data-Driven Approach to Identifying California's Major Faults. Earth and Space Science, 2021, 8, e2021EA001680.	1.1	14
10	Managing authentication and authorization in distributed science gateway middleware. Future Generation Computer Systems, 2020, 111, 780-785.	4.9	18
11	Automated Estimation and Tools to Extract Positions, Velocities, Breaks, and Seasonal Terms From Daily GNSS Measurements: Illuminating Nonlinear Salton Trough Deformation. Earth and Space Science, 2020, 7, e2019EA000644.	1.1	32
12	Targeted High-Resolution Structure from Motion Observations over the Mw 6.4 and 7.1 Ruptures of the Ridgecrest Earthquake Sequence. Seismological Research Letters, 2020, 91, 2087-2095.	0.8	7
13	Ground Deformation Data from GEER Investigations of Ridgecrest Earthquake Sequence. Seismological Research Letters, 2020, 91, 2024-2034.	0.8	17
14	An extensible Django-based web portal for Apache Airavata. , 2020, , .		8
15	Custos: Security Middleware for Science Gateways. , 2020, , .		3
16	INTEGRATED MODEL OF MODELS FOR GLOBAL FLOOD ALERTING. , 2020, , .		4
17	TopPIC Gateway: A Web Gateway for Top-Down Mass Spectrometry Data Interpretation. , 2020, , .		0
18	Toward Interoperable Cyberinfrastructure: Common Descriptions for Computational Resources and Applications. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
19	The Quakes Analytic Center Framework for Addressing Diverse Spatiotemporal Scales of Tectonic and Earthquake Processes. , 2020, , .		0
20	Integrating Science Gateways with Secure Cloud Computing Resources: An Examination of Two Deployment Patterns and Their Requirements. , 2020, , .		0
21	Jetstreamâ€™Early operations performance, adoption, and impacts. Concurrency Computation Practice and Experience, 2019, 31, e4683.	1.4	10
22	InterACTWEL Science Gateway for Adaptation Planning in Food-Energy-Water Sectors of Local Communities. , 2019, , .		2
23	The USD Science Gateway. , 2019, , .		0
24	How the Science Gateways Community Institute Supports Those Who Are Creating Websites to Access Shared Resources. , 2019, , .		1
25	The Distant Reader. , 2019, , .		1
26	LSU Computational System Biology Gateway for Education. , 2019, , .		4
27	The Quakes Concept for Observing and Mitigating Natural Disasters. , 2019, , .		1
28	Community Organizations: Changing the Culture in Which Research Software Is Developed and Sustained. Computing in Science and Engineering, 2019, 21, 8-24.	1.2	22
29	Science gateways: Sustainability via on-campus teams. Future Generation Computer Systems, 2019, 94, 97-102.	4.9	12
30	Virtual Clusters in the Jetstream Cloud. , 2019, , .		7
31	Cyberinfrastructure, Cloud Computing, Science Gateways, Visualization, and Cyberinfrastructure Ease of Use. Advances in Computer and Electrical Engineering Book Series, 2019, , 157-170.	0.2	2
32	Gathering requirements for advancing simulations in HPC infrastructures via science gateways. Future Generation Computer Systems, 2018, 82, 544-554.	4.9	7
33	Apache Airavata Resource Allocation System. , 2018, , .		0
34	Simplifying Access to Campus Resources at Southern Illinois University with a Science Gateway. , 2018, , .		0
35	The Science Gateways Community Institute at Two Years. , 2018, , .		12
36	The CSBG - LSU Gateway. , 2018, , .		0

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37	Building a Science Gateway For Processing and Modeling Sequencing Data Via Apache Airavata. , 2018, ,		4
38	Django Content Management System Evaluation and Integration with Apache Airavata. , 2018, , .		3
39	Evaluating NextCloud as a File Storage for Apache Airavata. , 2018, , .		2
40	Supporting Science Gateways Using Apache Airavata and SciGaP Services. , 2018, , .		22
41	Fracture Advancing Step Tectonics Observed in the Yuha Desert and Ocotillo, CA, Following the 2010 Mw 7.2 El Mayor-Cuicapah Earthquake. Earth and Space Science, 2018, 5, 456-472.	1.1	7
42	A New Science Gateway to Provide Decision Support on Carbon Capture and Storage Technologies. , 2018, , .		2
43	Science Gateway Implementation at the University of South Dakota. , 2018, , .		1
44	Using a Science Gateway to Deliver SimVascular Software as a Service for Classroom Instruction. , 2018, , .		1
45	Radar Determination of Fault Slip and Location in Partially Decorrelated Images. Pageoph Topical Volumes, 2018, , 101-116.	0.2	1
46	Cyberinfrastructure, Cloud Computing, Science Gateways, Visualization, and Cyberinfrastructure Ease of Use. , 2018, , 1063-1074.		4
47	Radar Determination of Fault Slip and Location in Partially Decorrelated Images. Pure and Applied Geophysics, 2017, 174, 2295-2310.	0.8	2
48	Using the Jetstream Research Cloud to Provide Science Gateway Resources. , 2017, , .		6
49	Science Gateways Incubator: Software Sustainability Meets Community Needs. , 2017, , .		2
50	Science Gateways: The Long Road to the Birth of an Institute. , 2017, , .		18
51	GSoC 2015 student contributions to GenApp and Airavata. Concurrency Computation Practice and Experience, 2016, 28, 1960-1970.	1.4	3
52	Integrating Apache Airavata with Docker, Marathon, and Mesos. Concurrency Computation Practice and Experience, 2016, 28, 1952-1959.	1.4	19
53	Apache Airavata security manager: Authentication and authorization implementations for a multi-tenant escience framework. , 2016, , .		8
54	Anatomy of the SEAGrid Science Gateway. , 2016, , .		2

#	ARTICLE	IF	CITATIONS
55	Community Science Exemplars in SEAGrid Science Gateway: Apache Airavata Based Implementation of Advanced Infrastructure. <i>Procedia Computer Science</i> , 2016, 80, 1927-1939.	1.2	66
56	GeoGateway: A system for analysis of UAVSAR data products. , 2016, , .		1
57	An Overview of the XSEDE Extended Collaborative Support Program. <i>Communications in Computer and Information Science</i> , 2016, , 3-13.	0.4	18
58	Cyberinfrastructure as a Platform to Facilitate Effective Collaboration between Institutions and Support Laboratories. , 2016, , .		2
59	Potential for a large earthquake near Los Angeles inferred from the 2014 La Habra earthquake. <i>Earth and Space Science</i> , 2015, 2, 378-385.	1.1	22
60	Science gateways today and tomorrow: positive perspectives of nearly 5000 members of the research community. <i>Concurrency Computation Practice and Experience</i> , 2015, 27, 4252-4268.	1.4	75
61	The GenApp framework integrated with Airavata for managed compute resource submissions. <i>Concurrency Computation Practice and Experience</i> , 2015, 27, 4292-4303.	1.4	11
62	Apache Airavata: design and directions of a science gateway framework. <i>Concurrency Computation Practice and Experience</i> , 2015, 27, 4282-4291.	1.4	38
63	Advantages to Geoscience and Disaster Response from QuakeSim Implementation of Interferometric Radar Maps in a GIS Database System. <i>Pure and Applied Geophysics</i> , 2015, 172, 2295-2304.	0.8	5
64	Multihazard Simulation and Cyberinfrastructure. <i>Pure and Applied Geophysics</i> , 2015, 172, 2083-2085.	0.8	3
65	Science gateways - leveraging modeling and simulations in HPC infrastructures via increased usability. , 2015, , .		0
66	Web Services for Dynamic Coloring of UAVSAR Images. <i>Pure and Applied Geophysics</i> , 2015, 172, 2325-2332.	0.8	3
67	Apache Airavata as a Laboratory. , 2015, , .		14
68	Authentication and Authorization Considerations for a Multi-tenant Service. , 2015, , .		6
69	E-DECIDER: Using Earth Science Data and Modeling Tools to Develop Decision Support for Earthquake Disaster Response. <i>Pure and Applied Geophysics</i> , 2015, 172, 2305-2324.	0.8	7
70	Cyberinfrastructure, Science Gateways, Campus Bridging, and Cloud Computing. , 2015, , 6562-6572.		1
71	Integrating Science Gateways with XSEDE Security. , 2014, , .		3
72	UAVSAR observations of triggered slip on the Imperial, Superstition Hills, and East Elmore Ranch Faults associated with the 2010 M 7.2 El Mayor-Cucapah earthquake. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 815-829.	1.0	28

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73	Who Cares about Science Gateways? A Large-Scale Survey of Community Use and Needs. , 2014, , .		4
74	A Credential Store for Multi-tenant Science Gateways. , 2014, , .		16
75	Apache Airavata: Design and Directions of a Science Gateway Framework. , 2014, , .		27
76	Cloud computing for geodetic imaging data processing, analysis, and modeling. , 2014, , .		0
77	The Apache Airavata Application Programming Interface: Overview and Evaluation with the UltraScan Science Gateway. , 2014, , .		29
78	GenApp Module Execution and Airavata Integration. , 2014, , .		2
79	Twitter bootstrap and AngularJS: Frontend frameworks to expedite science gateway development. , 2013, , .		13
80	Authoring a Science Gateway Cookbook. , 2013, , .		1
81	Enabling dark energy survey science analysis with simulations on XSEDE resources. , 2013, , .		3
82	US-SOMO cluster methods. , 2013, , .		2
83	Chaining Data and Visualization Web Services for Decision Making in Information Systems. Lecture Notes in Computer Science, 2013, , 44-53.	1.0	0
84	A Distributed Approach to Computational Earthquake Science: Opportunities and Challenges. Computing in Science and Engineering, 2012, 14, 31-42.	1.2	3
85	QuakeSim: Integrated modeling and analysis of geologic and remotely sensed data. , 2012, , .		3
86	Using Service-Based GIS to Support Earthquake Research and Disaster Response. Computing in Science and Engineering, 2012, 14, 21-30.	1.2	26
87	Web Service and Workflow Abstractions to Large Scale Nuclear Physics Calculations. , 2012, , .		2
88	Designing a road map for geoscience workflows. Eos, 2012, 93, 225-226.	0.1	12
89	Ultrascan solution modeler. , 2012, , .		7
90	Automatic Task Re-organization in MapReduce. , 2011, , .		13

#	ARTICLE	IF	CITATIONS
91	Investigating the Use of Gadgets, Widgets, and OpenSocial to Build Science Gateways. , 2011, , .		1
92	UltraScan gateway enhancements. , 2011, , .		3
93	Virtual laboratory for planetary materials ( <b>&lt;i&gt;VLab&lt;/i&gt;</b> ). , 2011, , .		5
94	Transitioning BioVLab cloud workbench to a science gateway. , 2011, , .		1
95	Distributed web security for science gateways. , 2011, , .		7
96	Apache airavata. , 2011, , .		115
97	Open community development for science gateways with apache rave. , 2011, , .		4
98	Improving usability and accessibility of cheminformatics tools for chemists through cyberinfrastructure and education. In <i>Silico Biology</i> , 2011, 11, 41-60.	0.4	3
99	The Quakesim portal and services: new approaches to science gateway development techniques. <i>Concurrency Computation Practice and Experience</i> , 2010, 22, 1732-1749.	1.4	3
100	Implementation, performance, and science results from a 30.7 TFLOPS IBM BladeCenter cluster. <i>Concurrency Computation Practice and Experience</i> , 2010, 22, 157-174.	1.4	0
101	High-performance hybrid information service architecture. <i>Concurrency Computation Practice and Experience</i> , 2010, 22, 2095-2123.	1.4	22
102	Generative topographic mapping by deterministic annealing. <i>Procedia Computer Science</i> , 2010, 1, 47-56.	1.2	5
103	BioDrugScreen: a computational drug design resource for ranking molecules docked to the human proteome. <i>Nucleic Acids Research</i> , 2010, 38, D765-D773.	6.5	31
104	Open grid computing environments. , 2010, , .		20
105	Advances in Cheminformatics Methodologies and Infrastructure to Support the Data Mining of Large, Heterogeneous Chemical Datasets. <i>Current Computer-Aided Drug Design</i> , 2010, 6, 50-67.	0.8	28
106	Building a Distributed Block Storage System for Cloud Infrastructure. , 2010, , .		6
107	Integrating chemistry scholarship with web architectures, grid computing and semantic web. , 2010, , .		1
108	A Federated Approach to Information Management in Grids. <i>International Journal of Web Services Research</i> , 2010, 7, 65-98.	0.5	5

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109	AVATS: Audio-video and textual synchronization. , 2009, , .		1
110	Supporting Cloud Computing with the Virtual Block Store System. , 2009, , .		7
111	Supporting cloud computing with the virtual block store system. , 2009, , .		0
112	Building the PolarGrid portal using web 2.0 and OpenSocial. , 2009, , .		26
113	Grids challenged by a Web 2.0 and multicore sandwich. Concurrency Computation Practice and Experience, 2009, 21, 265-280.	1.4	10
114	Using Web 2.0 for scientific applications and scientific communities. Concurrency Computation Practice and Experience, 2009, 21, 583-603.	1.4	15
115	Algorithms and the Grid. Computing and Visualization in Science, 2009, 12, 115-124.	1.2	26
116	Dynamic Resource-Critical Workflow Scheduling in Heterogeneous Environments. Lecture Notes in Computer Science, 2009, , 1-15.	1.0	2
117	Unified Data Access/Query over Integrated Data-views for Decision Making in Geographic Information Systems. , 2009, , 276-298.		0
118	The QuakeSim Project: Web Services for Managing Geophysical Data and Applications. Pure and Applied Geophysics, 2008, 165, 635-651.	0.8	22
119	XML Metadata Services. Concurrency Computation Practice and Experience, 2008, 20, 801-823.	1.4	26
120	Building and applying geographical information system Grids. Concurrency Computation Practice and Experience, 2008, 20, 1653-1695.	1.4	31
121	Special Issue Editorial Introduction: Grids and Geospatial Information Systems. Concurrency Computation Practice and Experience, 2008, 20, 1611-1615.	1.4	1
122	The QuakeSim Project: Web Services for Managing Geophysical Data and Applications. , 2008, , 635-651.		10
123	Information Federation in Grids. , 2008, , .		3
124	Cyberaide JavaScript: A JavaScript Commodity Grid Kit. , 2008, , .		10
125	SWARM: Scheduling Large-Scale Jobs over the Loosely-Coupled HPC Clusters. , 2008, , .		7
126	Open Grid Computing Environment's Workflow Suite for E-Science Projects. , 2008, , .		1



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127	QuakeSim: Web Services, Portals, and Infrastructure for Geophysics. Aerospace Conference Proceedings IEEE, 2008, , .	0.0	4
128	BioVLAB-Microarray: Microarray Data Analysis in Virtual Environment. , 2008, , .		23
129	Social networking for scientists using tagging and shared bookmarks: a Web 2.0 application. , 2008, , .		6
130	Collective Collaborative Tagging System. , 2008, , .		2
131	QuakeSim: Efficient Modeling of Sensor Web Data in a Web Services Environment. Aerospace Conference Proceedings IEEE, 2008, , .	0.0	1
132	The Problem Solving Environments of TeraGrid, Science Gateways, and the Intersection of the Two. , 2008, , .		1
133	SQMD: Architecture for Scalable, Distributed Database System Built on Virtual Private Servers. , 2008, , .		2
134	Modeling and On-the-Fly Solutions for Solid Earth Sciences: Web Services and Data Portal for Earthquake Early Warning System. , 2008, , .		4
135	A Retrospective on the Development of Web Service Specifications. , 2008, , 22-49.		2
136	Scalable, fault-tolerant management of Grid Services. , 2007, , .		3
137	Scalable, fault-tolerant management in a service oriented architecture. , 2007, , .		7
138	QuakeSim: Enabling Model Interactions in Solid Earth Science Sensor Webs. , 2007, , .		6
139	GTLAB: Grid Tag Libraries Supporting Workflows within Science Gateways. , 2007, , .		1
140	VLAB: Web services, portlets, and workflows for enabling cyber-infrastructure in computational mineral physics. Physics of the Earth and Planetary Interiors, 2007, 163, 333-346.	0.7	11
141	Architecture, performance, and scalability of a real-time global positioning system data grid. Physics of the Earth and Planetary Interiors, 2007, 163, 347-359.	0.7	7
142	Virtual laboratory for planetary materials: System service architecture overview. Physics of the Earth and Planetary Interiors, 2007, 163, 321-332.	0.7	15
143	GTLAB: Grid Tag Libraries Supporting Workflows within Science Gateways. , 2007, , .		4
144	Implementing a caching and tiling map server: a Web 2.0 case study. , 2007, , .		17

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145	Analysis of streaming GPS measurements of surface displacement through a web services environment. , 2007, , .		8
146	Web 2.0 for E-Science Environments. , 2007, , .		4
147	Web Service Infrastructure for Chemoinformatics. Journal of Chemical Information and Modeling, 2007, 47, 1303-1307.	2.5	41
148	The Open Grid Computing Environments collaboration: portlets and services for science gateways. Concurrency Computation Practice and Experience, 2007, 19, 921-942.	1.4	50
149	Management of real-time streaming data Grid services. Concurrency Computation Practice and Experience, 2007, 19, 983-998.	1.4	14
150	VLab: collaborative Grid services and portals to support computational material science. Concurrency Computation Practice and Experience, 2007, 19, 1717-1728.	1.4	26
151	Fault tolerant high performance Information Services for dynamic collections of Grid and Web services. Future Generation Computer Systems, 2007, 23, 317-337.	4.9	45
152	Grid Portal System Based on GPIR. , 2006, , .		2
153	A Framework for Secure End-to-End Delivery of Messages in Publish/Subscribe Systems. , 2006, , .		23
154	XML Metadata Services. , 2006, , .		11
155	QuakeSim and the Solid Earth Research Virtual Observatory. Pure and Applied Geophysics, 2006, 163, 2263-2279.	0.8	4
156	iSERVO: Implementing the International Solid Earth Research Virtual Observatory by Integrating Computational Grid and Geographical Information Web Services. Pure and Applied Geophysics, 2006, 163, 2281-2296.	0.8	33
157	Providing Portlet-Based Client Access to CIMA-Enabled Crystallographic Instruments, Sensors, and Data. , 2006, , .		4
158	Real Time Streaming Data Grid Applications. , 2006, , 253-267.		24
159	QuakeSim and the Solid Earth Research Virtual Observatory. , 2006, , 2263-2279.		5
160	Building messaging substrates for Web and Grid applications. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 1757-1773.	1.6	23
161	Automating metadata Web service deployment for problem solving environments. Future Generation Computer Systems, 2005, 21, 910-919.	4.9	3
162	Message-based cellular peer-to-peer grids: foundations for secure federation and autonomic services. Future Generation Computer Systems, 2005, 21, 401-415.	4.9	16

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163	Messaging in web service grid with applications to geographical information systems. <i>Advances in Parallel Computing</i> , 2005, 14, 305-331.	0.3	1
164	Building Problem-Solving Environments with Application Web Service toolkits. <i>Future Generation Computer Systems</i> , 2005, 21, 856-867.	4.9	5
165	A Web Services-Based Universal Approach to Heterogeneous Fault Databases. <i>Computing in Science and Engineering</i> , 2005, 7, 51-57.	1.2	10
166	Building Sensor Filter Grids: Information Architecture for the Data Deluge. , 2005, , .		2
167	Information Services for Dynamically Assembled Semantic Grids. , 2005, , .		35
168	GridFTP and Parallel TCP Support in NaradaBrokering. <i>Lecture Notes in Computer Science</i> , 2005, , 93-102.	1.0	7
169	Management of Real-Time Streaming Data Grid Services. <i>Lecture Notes in Computer Science</i> , 2005, , 3-12.	1.0	13
170	Making scientific applications as web services. <i>Computing in Science and Engineering</i> , 2004, 6, 93-96.	1.2	5
171	Interacting Data Services for Distributed Earthquake Modeling. <i>Lecture Notes in Computer Science</i> , 2003, , 863-872.	1.0	9
172	Towards dependable grid and web services. <i>Ubiquity</i> , 2003, 2003, 3-3.	0.2	3
173	Towards dependable grid and web services. <i>Ubiquity</i> , 2003, 2003, 3-3.	0.2	4
174	Grid services for earthquake science. <i>Concurrency Computation Practice and Experience</i> , 2002, 14, 371-393.	1.4	21
175	The Gateway computational Web portal. <i>Concurrency Computation Practice and Experience</i> , 2002, 14, 1411-1426.	1.4	26
176	Quantum films adsorbed on graphite: Third and fourth helium layers. <i>Physical Review B</i> , 2001, 63, .	1.1	12
177	Role of substrate corrugation in helium monolayer solidification. <i>Physical Review B</i> , 2000, 62, 5228-5237.	1.1	37
178	Path-integral Monte Carlo simulation of the second layer of $H_4e$ adsorbed on graphite. <i>Physical Review B</i> , 1999, 59, 3802-3814.	1.1	47
179	Monolayer Solid $H_4e$ Clusters on Graphite. <i>Physical Review Letters</i> , 1999, 83, 5314-5317.	2.9	44
180	Phase Diagram of Second Layer of $H_4e$ Adsorbed on Graphite. <i>Physical Review Letters</i> , 1998, 81, 156-159.	2.9	42

#	ARTICLE	IF	CITATIONS
181	Improving access to geodetic imaging crustal deformation data using GeoGateway. Earth Science Informatics, 0, , 1.	1.6	3
182	A Federated Approach to Information Management in Grids. , 0, , 71-103.		0