

CARREGA ALESSANDRO

Overview

? Unit: ICT
? Role: Ricercatore
? Grade: Ricercatore t.d. art. 24 c. 3 lett. A Legge 240/10 (t.pieno)
? SSD: IINF-03/A (Telecomunicazioni)
? Scopus ID: 36633941300
? Unige Id: 264115
? Retrieved at: 2025-11-14T15:17:14.939701

Contact

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? Page: <https://rubrica.unige.it/personale/V0VDWlts>
? Locations: Opera Pia - padiglione E (ED161450402), 3° piano, US161450402.III.019

Career

? Ar, 2013-06-03 ? 2017-06-02
? Cb, 2018-02-19 ? 2022-03-31
? Rd, 2022-02-01 ? 2028-02-29

Teaching

2025

? Cloud And Network Programming (104779), Lm-27 - Internet And Multimedia Engineering

2024

? Cyber Security (108931), Lm-27 - Internet And Multimedia Engineering
? Cloud And Network Programming (104779), Lm-27 - Internet And Multimedia Engineering

2023

? Cyber Security (108931), Lm-27 - Internet And Multimedia Engineering
? Internet Programming (104779), Lm-27 - Internet And Multimedia Engineering

2022

? Cyber Security (104781), Lm-27 - Internet And Multimedia Engineering
? Internet Programming (104779), Lm-27 - Internet And Multimedia Engineering

2020

? Fondamenti Di Informatica (60517), L-9 - Ingegneria Nautica

Scopus Metrics

? absolute; Docs: 52; Journals: 14; Conferences: 32; Citations: 493; H-index: 12
? 15 years (2010-2025); Docs: 52; Journals: 14; Conferences: 32; Citations: 493; H-index: 12
? 10 years (2015-2025); Docs: 41; Journals: 11; Conferences: 24; Citations: 268; H-index: 8
? 05 years (2020-2025); Docs: 20; Journals: 6; Conferences: 12; Citations: 163; H-index: 7

Scopus Products

1.
? Title: Toward Sustainable O-RAN Deployment: An In-Depth Analysis of Power Consumption
? Venue: IEEE Transactions on Green Communications and Networking
? Year: 2025
? Type: Journal

? Subtype: Article
? Citations: 5
? Doi: 10.1109/Tgcn.2024.3426108
? Scopus ID: 2-s2.0-85198749396
? eISSN: 24732400
? Volume: 9
? Issue: 2
? Pages: 429-444
? Authors: Baldini Gianmarco; Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Lombardo Chiara; Rabbani Ramin
? Keywords: 3-layer architecture | algorithm | cloud | Green networking | mobile | open-ran | placement
? Quartile:
2025:
? Computer Networks and Communications (Q1, rank 22, percentile 96)
? Renewable Energy, Sustainability and the Environment (Q1, rank 48, percentile 84)
? Source Id: 21100906361
? Author Ids:
57193911480;7006403406;8555973600;36633941300;57220364548;50061523000;58122114400
? Authoraffiliationids: 60103695;60025153;60025153;60025153;60025153;60025153;60103966
? Corresponding: Baldini G.

2.

? Title: Nephele - Remote Healthcare Services, Ultrasound Medical Device Dematerialization
? Venue: 2025 10th International Conference on Smart and Sustainable Technologies Splitech 2025
? Year: 2025
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 0
? DOI: 10.23919/SpliTech65624.2025.11091668
? Scopus ID: 2-s2.0-105013468249
? Authors: Passalacqua Antonio; Pedemonte Giacomo; Volta Silvia; Carrega Alessandro
? Keywords: Cloud | Dematerialization | Edge | Hyper-Distributed Application | IoT | Ultrasound Medical Device
? Source Id: 21101321197
? Author Ids: 59666010000;59937126300;60051259100;36633941300
? Authoraffiliationids: 60113818;60113818;60113818;133023620
? Corresponding: Passalacqua A.

3.

? Title: Efficient, Reliable and Secure Framework for the 5G Virtualization of the UltraSound Medical System
? Venue: 2024 IEEE International Conference on E Health Networking Application and Services Healthcom 2024
? Year: 2024
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 1
? Doi: 10.1109/Healthcom60970.2024.10880737
? Scopus ID: 2-s2.0-85219632036
? Authors: Carrega Alessandro; Bruschi Roberto; Bolla Raffaele; Passalacqua Antonio
? Keywords: 5G | Framework | NFV | Security | UltraSound Medical System | Virtualization
? Source Id: 21101278600

? Author Ids: 36633941300;8555973600;7006403406;59666010000

? Authoraffiliationids: 60025153;60025153;60025153;132316140

? Corresponding: Carrega A.

4.

? Title: A Stochastic Knapsack Model for Energy Efficient Management of Multi-Server Queues

? Venue: 2024 7th International Balkan Conference on Communications and Networking Balkancom 2024

? Year: 2024

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 0

? DOI: 10.1109/BalkanCom61808.2024.10557204

? Scopus ID: 2-s2.0-85197369833

? Pages: 224-229

? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Lombardo Chiara; Siccardi Beatrice

? Keywords: Adaptive Rate | Energy Efficient Networking | Energy-Performance Tradeoff | Load Balancing | MEC

? Source Id: 21101232811

? Author Ids: 7006403406;8555973600;36633941300;57220364548;50061523000;57976887200

? Authoraffiliationids: 60025153-60103966;60025153-60103966;60025153-60103966;60025153-60103966;60025153-60103966;60025153-60103966

? Corresponding: Bolla R.

5.

? Title: Revolutionizing Cloud Security with Programmable Frameworks: a Novel Approach

? Venue: 2024 IEEE Future Networks World Forum Fnwf 2024

? Year: 2024

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 0

? Doi: 10.1109/Fnwf63303.2024.11028857

? Scopus ID: 2-s2.0-105009080304

? Pages: 681-686

? Authors: Carrega Alessandro

? Keywords: Cloud | Framework | Programmability | Security

? Source Id: 21101303655

? Author Ids: 36633941300

? Authoraffiliationids: 60025153

? Corresponding: Carrega A.

6.

? Title: ePEM: An End-to-End Proactive Secure Connectivity Manager for 6G Orchestrator Solutions

? Venue: IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks Camad

? Year: 2024

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 0

? Doi: 10.1109/Camad62243.2024.10942805

? Scopus ID: 2-s2.0-105002851823

? eISSN: 23784873

? Authors: Carrega Alessandro; Rabbani Ramin

? Keywords: 6G | blueprint | NFV | orchestration | process automation | security

? Quartile:

2025:

? Computer Graphics and Computer-Aided Design (Q3, rank 83, percentile 37)

? Computer Networks and Communications (Q3, rank 367, percentile 32)

2024:

? Computer Graphics and Computer-Aided Design (Q3, rank 87, percentile 31)

? Computer Networks and Communications (Q3, rank 355, percentile 30)

? Source Id: 21100809799

? Author Ids: 36633941300;58122114400

? Authoraffiliationids: 60025153;60025153

? Corresponding: Carrega A.

7.

? Title: Intent-Driven Distributed Applications Management Over Compute and Network Resources in the Computing Continuum

? Venue: Proceedings 19th International Conference on Distributed Computing in Smart Systems and the Internet of Things Dcoss lot 2023

? Year: 2023

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 10

? DOI: 10.1109/DCOSS-IoT58021.2023.00074

? Scopus ID: 2-s2.0-85174385000

? Pages: 429-436

? Authors: Zafeiropoulos Anastasios; Fotopoulou Eleni; Vassilakis Constantinos; Tzanettis Ioannis; Lombardo Chiara; Carrega Alessandro; Bruschi Roberto

? Keywords: computing continuum | distributed applications | intent-driven orchestration | network operating support system | system of systems

? Source Id: 21101183572

? Author Ids:

24333644200;8727584800;55627877790;57480145000;50061523000;36633941300;8555973600

? Authoraffiliationids:

60104215;60002947;60002947;60002947;124426043;124426043;124426043

? Corresponding: Zafeiropoulos A.

8.

? Title: Automating Mitigation of Amplification Attacks in NFV Services

? Venue: IEEE Transactions on Network and Service Management

? Year: 2022

? Type: Journal

? Subtype: Article

? Citations: 6

? Doi: 10.1109/Tnsm.2022.3172880

? Scopus ID: 2-s2.0-85132527635

? eISSN: 19324537

? Volume: 19

? Issue: 3

? Pages: 2382-2396

? Authors: Repetto Matteo; Bruno Gianmarco; Yusupov Jalolliddin; Lamanna Guerino; Ertl Benjamin; Carrega Alessandro

? Keywords: 5G | Amplification attacks | ARIMA | DDoS | eBPF | NFV

? Quartile:

2025:

? Electrical and Electronic Engineering (Q1, rank 95, percentile 90)

? Computer Networks and Communications (Q1, rank 57, percentile 89)

2022:

? Electrical and Electronic Engineering (Q1, rank 116, percentile 84)
? Computer Networks and Communications (Q1, rank 64, percentile 83)
? Source Id: 7200153156
? Author Ids: 57194639871;36701007300;57196119190;35324928200;58101305100;36633941300
? Authoraffiliationids: 60021199;118424337;60112930;128779023;126321704;60103966
? Corresponding: Repetto M.

9.

? Title: Trading off Power Consumption and Delay in the Execution of Network Functions by Dynamic Activation of Processing Units
? Venue: Proceedings of the 2022 IEEE International Conference on Network Softwarization Network Softwarization Coming of Age New Challenges and Opportunities Netsoft 2022
? Year: 2022
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 2
? DOI: 10.1109/NetSoft54395.2022.9844039
? Scopus ID: 2-s2.0-85136797445
? Pages: 1-6
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Lombardo Chiara
? Keywords: Energy efficiency | hardware offloading | MEC
? Source Id: 21101104270
? Author Ids: 7006403406;8555973600;36633941300;57220364548;50061523000
? Authoraffiliationids: 60025153-60103966;60025153-60103966;60025153;60025153-60103966;60103966
? Corresponding: Bolla R.

10.

? Title: A Reference Architecture for Management of Security Operations in Digital Service Chains
? Venue: Lecture Notes in Computer Science Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics
? Year: 2022
? Type: Book Series
? Subtype: Book Chapter
? Citations: 2
? Doi: 10.1007/978-3-031-04036-8_1
? Scopus ID: 2-s2.0-85128222612
? Issn: 03029743
? eISSN: 16113349
? Volume: 13300 Lncs
? Pages: 1-31
? Authors: Carrega Alessandro; Grieco Giovanni; Striccoli Domenico; Papoutsakis Manos; Lima Tomas; Carretero Jos[^] Ignacio; Repetto Matteo
? Keywords: Analytics pipeline | Cybersecurity architecture | Detection | Digital service chain
? Quartile:
2025:
? Theoretical Computer Science (Q3, rank 70, percentile 48)
? Computer Science (all) (Q3, rank 129, percentile 46)
2022:
? Computer Science (all) (Q3, rank 126, percentile 46)
? Theoretical Computer Science (Q3, rank 84, percentile 34)
? Source Id: 25674

? Author Ids:
36633941300;57211760048;55911429000;56465037000;57576679400;57576472000;57194639871
? Authoraffiliationids:
60103966;60027299;60027299;60019181;125934390;120313275;60021199
? Corresponding: Carrega A.

11.

? Title: Monitoring Network Flows in Containerized Environments
? Venue: Lecture Notes in Computer Science Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics
? Year: 2022
? Type: Book Series
? Subtype: Book Chapter
? Citations: 2
? Doi: 10.1007/978-3-031-04036-8_2
? Scopus ID: 2-s2.0-85128187559
? Issn: 03029743
? eISSN: 16113349
? Volume: 13300 Lncs
? Pages: 32-55
? Authors: Repetto Matteo; Carrega Alessandro
? Keywords: Cloud computing | Cloud-native applications | eBPF | Network flow monitoring
? Quartile:
2025:
? Theoretical Computer Science (Q3, rank 70, percentile 48)
? Computer Science (all) (Q3, rank 129, percentile 46)
2022:
? Computer Science (all) (Q3, rank 126, percentile 46)
? Theoretical Computer Science (Q3, rank 84, percentile 34)
? Source Id: 25674
? Author Ids: 57194639871;36633941300
? Authoraffiliationids: 60021199;60103966
? Corresponding: Repetto M.

12.

? Title: An Effective and Efficient Approach to Improve Visibility Over Network Communications
? Venue: Journal of Wireless Mobile Networks Ubiquitous Computing and Dependable Applications
? Year: 2021
? Type: Journal
? Subtype: Article
? Citations: 6
? Doi: 10.22667/Jowua.2021.12.31.089
? Scopus ID: 2-s2.0-85129012912
? Issn: 20935374
? eISSN: 20935382
? Volume: 12
? Issue: 4
? Pages: 89-108
? Authors: Zuppelli Marco; Carrega Alessandro; Repetto Matteo
? Keywords: eBPF | network covert channels | network monitoring
? Quartile:
2025:
? Computer Networks and Communications (Q2, rank 182, percentile 66)

? Computer Science (miscellaneous) (Q2, rank 64, percentile 63)

? Computer Science Applications (Q2, rank 372, percentile 62)

2021:

? Computer Science (miscellaneous) (Q1, rank 21, percentile 77)

? Computer Networks and Communications (Q2, rank 131, percentile 63)

? Computer Science Applications (Q2, rank 280, percentile 62)

? Source Id: 21100262490

? Author Ids: 57219265208;36633941300;57194639871

? Authoraffiliationids: 60021199;60103966;60021199-128051712

? Corresponding: Zuppelli M.

13.

? Title: An Autonomous Cybersecurity Framework for Next-generation Digital Service Chains

? Venue: Journal of Network and Systems Management

? Year: 2021

? Type: Journal

? Subtype: Article

? Citations: 17

? DOI: 10.1007/s10922-021-09607-7

? Scopus ID: 2-s2.0-85106904683

? Issn: 10647570

? eISSN: 15737705

? Volume: 29

? Issue: 4

? Authors: Repetto Matteo; Striccoli Domenico; Piro Giuseppe; Carrega Alessandro; Boggia Gennaro; Bolla Raffaele

? Keywords: Access control | Cybersecurity framework | Digital service chains | Identity management | Threat identification

? Quartile:

2025:

? Computer Networks and Communications (Q1, rank 85, percentile 84)

? Information Systems (Q1, rank 86, percentile 82)

? Hardware and Architecture (Q1, rank 43, percentile 81)

? Strategy and Management (Q1, rank 100, percentile 80)

2021:

? Strategy and Management (Q2, rank 125, percentile 72)

? Information Systems (Q2, rank 112, percentile 68)

? Computer Networks and Communications (Q2, rank 122, percentile 66)

? Hardware and Architecture (Q2, rank 60, percentile 64)

? Source Id: 27287

? Author Ids: 57194639871;55911429000;29068119300;36633941300;6603152330;7006403406

? Authoraffiliationids: 60021199;60027299-60103966;60027299-60103966;60103966;60027299-60103966;60103966-60025153

? Corresponding: Repetto M.

14.

? Title: Evaluating ML-based DDoS Detection with Grid Search Hyperparameter Optimization

? Venue: Proceedings of the 2021 IEEE Conference on Network Softwarization Accelerating Network Softwarization in the Cognitive Age Netsoft 2021

? Year: 2021

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 26

? DOI: 10.1109/NetSoft51509.2021.9492633

? Scopus ID: 2-s2.0-85112070400
? Pages: 402-408
? Authors: Sanchez Odnan Ref; Repello Matteo; Carrega Alessandro; Bolla Raffaele
? Keywords: DDoS Detection | Machine Learning | Network Security
? Source Id: 21101055105
? Author Ids: 57193711034;57194639871;36633941300;7006403406
? Authoraffiliationids: 124426043;60021199;124426043;124426043-60025153
? Corresponding: Sanchez O.R.

15.

? Title: Leveraging the 5G architecture to mitigate amplification attacks
? Venue: Proceedings of the 2021 IEEE Conference on Network Softwarization Accelerating Network Softwarization in the Cognitive Age Netsoft 2021
? Year: 2021
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 2
? DOI: 10.1109/NetSoft51509.2021.9492545
? Scopus ID: 2-s2.0-85112051507
? Pages: 443-449
? Authors: Repetto Matteo; Carrega Alessandro; Lamanna Guerino; Yusupov Jaloliddin; Toscano Orazio; Bruno Gianmarco; Nuovo Michele; Cappelli Marco
? Keywords: Covert channels | Detection | EBPF | Stegomalware | Syscall tracing
? Source Id: 21101055105
? Author Ids: 57194639871;36633941300;35324928200;57196119190;57226600670;36701007300;57226608295;57226594088
? Authoraffiliationids: 126689000;126688931;126689594;126689982;126690412;126690412;126690412;126690412
? Corresponding: Repetto M.

16.

? Title: Feature Selection Evaluation towards a Lightweight Deep Learning DDoS Detector
? Venue: IEEE International Conference on Communications
? Year: 2021
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 26
? Doi: 10.1109/lcc42927.2021.9500458
? Scopus ID: 2-s2.0-85112043430
? Issn: 15503607
? Authors: Sanchez Odnan Ref; Repetto Matteo; Carrega Alessandro; Bolla Raffaele; Pajo Jane Frances
? Keywords: ANOVA | DDoS Detection | Deep Learning | Feature Selection
? Source Id: 33201
? Author Ids: 57193711034;57194639871;36633941300;7006403406;57189657677
? Authoraffiliationids: 124426043;124426043;124426043;124426043;124426043
? Corresponding: Sanchez O.R.

17.

? Title: An architecture to manage security operations for digital service chains
? Venue: Future Generation Computer Systems
? Year: 2021
? Type: Journal
? Subtype: Article
? Citations: 28
? DOI: 10.1016/j.future.2020.08.044
? Scopus ID: 2-s2.0-85090920156

? Issn: 0167739x
? Volume: 115
? Pages: 251-266
? Authors: Repetto Matteo; Carrega Alessandro; Rapuzzi Riccardo
? Keywords: Cyber-security paradigms | Digital services | Security architectures | Service mesh
? Quartile:
2025:
? Hardware and Architecture (Q1, rank 5, percentile 98)
? Computer Networks and Communications (Q1, rank 15, percentile 97)
? Software (Q1, rank 26, percentile 94)
2021:
? Hardware and Architecture (Q1, rank 2, percentile 99)
? Computer Networks and Communications (Q1, rank 5, percentile 98)
? Software (Q1, rank 10, percentile 97)
? Source Id: 12264
? Author Ids: 57194639871;36633941300;24470264700
? Authoraffiliationids: 60021199;60103966;60103966
? Corresponding: Repetto M.

18.

? Title: Coupling energy efficiency and quality for consolidation of cloud workloads
? Venue: Computer Networks
? Year: 2020
? Type: Journal
? Subtype: Article
? Citations: 7
? DOI: 10.1016/j.comnet.2020.107210
? Scopus ID: 2-s2.0-85082874943
? Issn: 13891286
? Volume: 174
? Authors: Carrega Alessandro; Repetto Matteo
? Keywords: Elastic cloud applications | Energy efficiency | Infrastructure-as-a-service cloud model | Quality of service | Workload consolidation
? Quartile:
2025:
? Computer Networks and Communications (Q1, rank 96, percentile 82)
2020:
? Computer Networks and Communications (Q1, rank 42, percentile 87)
? Source Id: 26811
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 124199660;60021199
? Corresponding: Carrega A.

19.

? Title: Programmable data gathering for detecting stegomalware
? Venue: Proceedings of the 2020 IEEE Conference on Network Softwarization Bridging the Gap Between AI and Network Softwarization Netsoft 2020
? Year: 2020
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 19
? DOI: 10.1109/NetSoft48620.2020.9165537
? Scopus ID: 2-s2.0-85091965833
? Pages: 422-429
? Authors: Carrega Alessandro; Caviglione Luca; Repetto Matteo; Zuppelli Marco

? Keywords: Covert channels | Detection | EBPF | Stegomalware | Syscall tracing
? Source Id: 21101022771
? Author Ids: 36633941300;8301144200;57194639871;57219265208
? Authoraffiliationids: ;125183870;125183870;125183870
? Corresponding: Carrega A.

20.

? Title: A novel cyber-security framework leveraging programmable capabilities in digital services
? Venue: Ceur Workshop Proceedings
? Year: 2020
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 4
? Scopus ID: 2-s2.0-85084765311
? Issn: 16130073
? Volume: 2597
? Pages: 201-211
? Authors: Repetto Matteo; Carrega Alessandro; Duzha Armend
? Quartile:
2025:
? Computer Science (all) (Q4, rank 214, percentile 11)
2020:
? Computer Science (all) (Q4, rank 179, percentile 21)
? Source Id: 21100218356
? Author Ids: 57194639871;36633941300;57193886968
? Authoraffiliationids: 60021199;60103966;119210749
? Corresponding: Repetto M.

21.

? Title: Data Log Management for Cyber-Security Programmability of Cloud Services and Applications
? Venue: Cysarm 2019 Proceedings of the 1st ACM Workshop on Workshop on Cyber Security Arms Race
? Year: 2019
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 1
? Doi: 10.1145/3338511.3357351
? Scopus ID: 2-s2.0-85098619322
? Pages: 47-52
? Authors: Carrega Alessandro; Repetto Matteo
? Keywords: cloud | cyber-security | data inspection | log management | programmability
? Source Id: 21101033192
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 60103966;60103966
? Corresponding: Carrega A.

22.

? Title: Automated Security Management for Virtual Services
? Venue: IEEE Conference on Network Function Virtualization and Software Defined Networks Nfv Sdn 2019 Proceedings
? Year: 2019
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 0
? Doi: 10.1109/Nfv-Sdn47374.2019.9040069

? Scopus ID: 2-s2.0-85082989789
? Authors: Repetto M.; Carrega A.; Yusupov J.; Valenza F.; Risso F.; Lamanna G.
? Source Id: 21100977411
? Author Ids: 57194639871;36633941300;57196119190;56875326800;7003461626;35324928200
? Authoraffiliationids: 60103966;60103966;60012162;60012162;60012162;114775333
? Corresponding: Repetto M.

23.

? Title: Towards Novel Security Architectures for Network Functions Virtualization
? Venue: IEEE Conference on Network Function Virtualization and Software Defined Networks Nfv Sdn 2019 Proceedings
? Year: 2019
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 0
? Doi: 10.1109/Nfv-Sdn47374.2019.9040068
? Scopus ID: 2-s2.0-85082986657
? Authors: Repetto M.; Carrega A.; Lamanna G.
? Source Id: 21100977411
? Author Ids: 57194639871;36633941300;35324928200
? Authoraffiliationids: 60103966;60103966;114775333
? Corresponding: Repetto M.

24.

? Title: An architecture to manage security services for cloud applications
? Venue: 2019 4th International Conference on Computing Communications and Security Icccs 2019
? Year: 2019
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 5
? Doi: 10.1109/Cccs.2019.8888061
? Scopus ID: 2-s2.0-85075400505
? Authors: Repetto M.; Carrega A.; Lamanna G.
? Keywords: cloud computing | Security architectures | software orchestration
? Source Id: 21100936372
? Author Ids: 57194639871;36633941300;35324928200
? Authoraffiliationids: 60103966;114775333;60103966
? Corresponding: Repetto M.

25.

? Title: Energy efficiency for edge multimedia elastic applications
? Venue: Multimedia Tools and Applications
? Year: 2019
? Type: Journal
? Subtype: Article
? Citations: 2
? DOI: 10.1007/s11042-018-7050-x
? Scopus ID: 2-s2.0-85065417399
? Issn: 13807501
? eISSN: 15737721
? Volume: 78
? Issue: 17
? Pages: 24739-24764
? Authors: Carrega Alessandro; Portomauro Giancarlo; Repetto Matteo; Robino Giorgio
? Keywords: Edge computing | Elastic transcoding | Energy-efficiency | Quality of service

? Quartile:

2025:

? Media Technology (Q1, rank 6, percentile 92)

? Computer Networks and Communications (Q1, rank 79, percentile 85)

? Software (Q1, rank 79, percentile 84)

? Hardware and Architecture (Q1, rank 39, percentile 83)

2019:

? Media Technology (Q1, rank 14, percentile 80)

? Computer Networks and Communications (Q2, rank 92, percentile 70)

? Hardware and Architecture (Q2, rank 56, percentile 64)

? Software (Q2, rank 152, percentile 59)

? Source Id: 25627

? Author Ids: 36633941300;15128054100;57194639871;57202572872

? Authoraffiliationids: 128686803;60025153;128686803;128686803

? Corresponding: Carrega A.

26.

? Title: An abstraction layer for cybersecurity context

? Venue: 2019 International Conference on Computing Networking and Communications Iccnc 2019

? Year: 2019

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 1

? Doi: 10.1109/iccnc.2019.8685665

? Scopus ID: 2-s2.0-85064968198

? Pages: 214-218

? Authors: Bolla R.; Carrega A.; Repetto M.

? Source Id: 21100904759

? Author Ids: 7006403406;36633941300;57194639871

? Authoraffiliationids: 60025153;60103966;60103966

? Corresponding: Bolla R.

27.

? Title: Situational Awareness in Virtual Networks: The ASTRID Approach

? Venue: Proceedings of the 2018 IEEE 7th International Conference on Cloud Networking Cloudnet 2018

? Year: 2018

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 4

? DOI: 10.1109/CloudNet.2018.8549540

? Scopus ID: 2-s2.0-85060217743

? Authors: Carrega A.; Repetto M.; Risso F.; Covaci S.; Zafeiropoulos A.; Giannetsos T.; Toscano O.

? Source Id: 21100895317

? Author Ids:

36633941300;57194639871;7003461626;6701384755;24333644200;24605106000;57226600670

? Authoraffiliationids: 60103966;60103966;60012162;60011604;60159730;60021097;113659619

? Corresponding: Carrega A.

28.

? Title: Boosting energy efficiency and quality of service through orchestration tools

? Venue: IEEE Cloud Computing

? Year: 2018

? Type: Trade Journal

? Subtype: Article

? Citations: 2
? Doi: 10.1109/Mcc.2018.064181119
? Scopus ID: 2-s2.0-85057963469
? eISSN: 23256095
? Volume: 5
? Issue: 6
? Pages: 38-47
? Authors: Carrega Alessandro; Portomauro Giancarlo; Repetto Matteo; Robino Giorgio
? Keywords: cloud data centers | energy efficiency | quality of service
? Quartile:
2018:
? Computer Science (miscellaneous) (Q1, rank 6, percentile 90)
? Computer Science Applications (Q1, rank 83, percentile 86)
? Computer Networks and Communications (Q1, rank 44, percentile 85)
? Software (Q1, rank 63, percentile 82)
? Source Id: 21100373966
? Author Ids: 36633941300;15128054100;57194639871;57202572872
? Authoraffiliationids: 60103966;60025153;60103966;60103966
? Corresponding: Carrega A.

29.

? Title: Balancing QoS and power consumption in programmable 5G infrastructures
? Venue: Transactions on Emerging Telecommunications Technologies
? Year: 2018
? Type: Journal
? Subtype: Article
? Citations: 2
? DOI: 10.1002/ett.3425
? Scopus ID: 2-s2.0-85056419869
? Issn: 21615748
? eISSN: 21613915
? Volume: 29
? Issue: 11
? Authors: Carrega Alessandro; Portomauro Giancarlo; Repetto Matteo; Robino Giorgio
? Quartile:
2025:
? Electrical and Electronic Engineering (Q1, rank 129, percentile 87)
2018:
? Electrical and Electronic Engineering (Q2, rank 229, percentile 65)
? Source Id: 21100389313
? Author Ids: 36633941300;15128054100;57194639871;57202572872
? Authoraffiliationids: 60103966;60103966;60103966;60103966
? Corresponding: Carrega A.

30.

? Title: Cloud Applications Consolidation through Context Information and Heuristic optimization
? Venue: 2018 28th International Telecommunication Networks and Applications Conference Itnac 2018
? Year: 2018
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 1
? Doi: 10.1109/Atnac.2018.8615406
? Scopus ID: 2-s2.0-85062178077
? Authors: Carrega Alessandro; Repetto Matteo

? Source Id: 21101179363
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 121101656;121101656
? Corresponding: Carrega A.

31.

? Title: Towards Prediction of Power Consumption of Virtual Machines for Varying Loads
? Venue: 2018 28th International Telecommunication Networks and Applications Conference Itnac 2018
? Year: 2018
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 5
? Doi: 10.1109/Atnac.2018.8615319
? Scopus ID: 2-s2.0-85062170633
? Authors: Salam Humaira Abdul; Davoli Franco; Carrega Alessandro; Timm-Giel Andreas
? Keywords: power modeling | power profiling | regression model | Virtual machine
? Source Id: 21101179363
? Author Ids: 57207039310;57220364548;36633941300;6506281575
? Authoraffiliationids: 60025153-60010338;60025153;121101656;60010338
? Corresponding: Salam H.A.

32.

? Title: OpenStack extensions for QoS and energy efficiency in edge computing
? Venue: 2018 3rd International Conference on Fog and Mobile Edge Computing Fmec 2018
? Year: 2018
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 8
? Doi: 10.1109/Fmec.2018.8364044
? Scopus ID: 2-s2.0-85048837677
? Pages: 50-57
? Authors: Carrega Alessandro; Repetto Matteo; Robino Giorgio; Portomauro Giancarlo
? Keywords: Energy efficiency | mobile edge computing | QoS
? Source Id: 21100865173
? Author Ids: 36633941300;57194639871;57202572872;15128054100
? Authoraffiliationids: 60103966;60103966;60103966;60025153
? Corresponding: Carrega A.

33.

? Title: Improving efficiency of edge computing infrastructures through orchestration models
? Venue: Computers
? Year: 2018
? Type: Journal
? Subtype: Article
? Citations: 4
? DOI: 10.3390/computers7020036
? Scopus ID: 2-s2.0-85056789461
? eISSN: 2073431X
? Volume: 7
? Issue: 2
? Authors: Bolla Raffaele; Carrega Alessandro; Repetto Matteo; Robino Giorgio
? Keywords: Edge computing | Energy efficiency | QoS
? Quartile:
2025:
? Computer Science (miscellaneous) (Q1, rank 26, percentile 85)

? Computer Networks and Communications (Q1, rank 90, percentile 83)
? Human-Computer Interaction (Q2, rank 55, percentile 71)
2018:
? Computer Networks and Communications (Q3, rank 175, percentile 40)
? Human-Computer Interaction (Q3, rank 66, percentile 35)
? Source Id: 21100886391
? Author Ids: 7006403406;36633941300;57194639871;57202572872
? Authoraffiliationids: 60025153;60103966;60103966;60103966
? Corresponding: Bolla R.

34.

? Title: Corrections to: "Green Networking With Packet Processing Engines: Modeling and Optimization"
? Venue: IEEE ACM Transactions on Networking
? Year: 2017
? Type: Journal
? Subtype: Article in Press
? Citations: 6
? Doi: 10.1109/Tnet.2017.2761892
? Scopus ID: 2-s2.0-85032455194
? Issn: 10636692
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Pajo Jane Frances
? Keywords: Genetic expression | Green communications | Servers | Telecommunication services | Telecommunication traffic
? Quartile:
2017:
? Electrical and Electronic Engineering (Q1, rank 92, percentile 86)
? Computer Science Applications (Q1, rank 87, percentile 84)
? Computer Networks and Communications (Q1, rank 44, percentile 84)
? Software (Q1, rank 75, percentile 79)
? Source Id: 27237
? Author Ids: 7006403406;8555973600;36633941300;57220364548;57189657677
? Authoraffiliationids: 60025153;60103966;60025153;60025153;60025153
? Corresponding: Bolla R.

35.

? Title: Energy-Aware Consolidation Scheme for Data Center Cloud Applications
? Venue: Proceedings of the 29th International Teletraffic Congress Itc 2017
? Year: 2017
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 6
? Doi: 10.23919/Itc.2017.8065706
? Scopus ID: 2-s2.0-85040237525
? Volume: 2
? Pages: 24-29
? Authors: Carrega Alessandro; Repetto Matteo
? Source Id: 21100795279
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 60025153;60103966
? Corresponding: Carrega A.

36.

? Title: A Middleware for Mobile Edge Computing
? Venue: IEEE Cloud Computing
? Year: 2017

? Type: Trade Journal
? Subtype: Article
? Citations: 25
? Doi: 10.1109/Mcc.2017.3791021
? Scopus ID: 2-s2.0-85032191940
? eISSN: 23256095
? Volume: 4
? Issue: 4
? Pages: 26-37
? Authors: Carrega A.; Repetto M.; Gouvas P.; Zafeiropoulos A.
? Keywords: distributed cloud computing | distributed software development and deployment | mobile edge computing
? Quartile:
2017:
? Computer Science (miscellaneous) (Q1, rank 9, percentile 84)
? Computer Networks and Communications (Q1, rank 49, percentile 82)
? Computer Science Applications (Q1, rank 109, percentile 80)
? Software (Q1, rank 85, percentile 77)
? Source Id: 21100373966
? Author Ids: 36633941300;57194639871;55887996800;24333644200
? Authoraffiliationids: 60025153;116607453;60159730;60159730
? Corresponding: Carrega A.

37.

? Title: A network-centric architecture for building the cloud continuum
? Venue: 2017 International Conference on Computing Networking and Communications Icncc 2017
? Year: 2017
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 4
? Doi: 10.1109/lccnc.2017.7876215
? Scopus ID: 2-s2.0-85017380629
? Pages: 701-705
? Authors: Carrega A.; Repetto M.
? Source Id: 21100806001
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 60025153;116607453
? Corresponding: Carrega A.

38.

? Title: Green and heuristics-based consolidation scheme for data center cloud applications
? Venue: Communications in Computer and Information Science
? Year: 2017
? Type: Book Series
? Subtype: Conference Paper
? Citations: 0
? Doi: 10.1007/978-3-319-67639-5_17
? Scopus ID: 2-s2.0-85030153378
? Issn: 18650929
? Volume: 766
? Pages: 230-250
? Authors: Carrega Alessandro; Repetto Matteo
? Keywords: Cloud applications | Consolidation | Energy-aware | Green | Heuristics | Optimization | Virtual machines

? Quartile:
2025:
? Mathematics (all) (Q3, rank 287, percentile 30)
? Computer Science (all) (Q4, rank 211, percentile 13)
2017:
? Mathematics (all) (Q3, rank 225, percentile 32)
? Computer Science (all) (Q4, rank 162, percentile 22)
? Source Id: 17700155007
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 60025153;60103966
? Corresponding: Carrega A.

39.

? Title: Exploiting novel software development paradigms to increase the sustainability of data centers
? Venue: Proceedings 9th IEEE ACM International Conference on Utility and Cloud Computing Ucc 2016
? Year: 2016
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 8
? Doi: 10.1145/2996890.3007878
? Scopus ID: 2-s2.0-85009113608
? Pages: 310-315
? Authors: Carrega A.; Repetto M.
? Keywords: Consolidation algorithms | Energy efficiency | Green data centers | Software development paradigms
? Source Id: 21100791244
? Author Ids: 36633941300;57194639871
? Authoraffiliationids: 60025153;116607453
? Corresponding: Carrega A.

40.

? Title: A Game for Energy-Aware Allocation of Virtualized Network Functions
? Venue: Journal of Electrical and Computer Engineering
? Year: 2016
? Type: Journal
? Subtype: Article
? Citations: 18
? Doi: 10.1155/2016/4067186
? Scopus ID: 2-s2.0-84959168219
? Issn: 20900147
? eISSN: 20900155
? Volume: 2016
? Authors: Bruschi Roberto; Carrega Alessandro; Davoli Franco
? Quartile:
2025:
? Signal Processing (Q2, rank 64, percentile 67)
? Electrical and Electronic Engineering (Q2, rank 332, percentile 66)
? Computer Science (all) (Q2, rank 84, percentile 65)
2016:
? Computer Science (all) (Q2, rank 94, percentile 52)
? Electrical and Electronic Engineering (Q3, rank 356, percentile 45)
? Signal Processing (Q3, rank 58, percentile 38)
? Source Id: 21100197510
? Author Ids: 8555973600;36633941300;57220364548

? Authoraffiliationids: 60025153;60025153;60025153

? Corresponding: Bruschi R.

41.

? Title: SDN-Enabled Energy-Efficient Network Management

? Venue: Green Communications Principles Concepts and Practice

? Year: 2015

? Type: Book

? Subtype: Book Chapter

? Citations: 3

? DOI: 10.1002/9781118759257.ch17

? Scopus ID: 2-s2.0-84933540050

? Pages: 323-338

? Authors: Jarschel Michael; Hoffeld Tobias; Davoli Franco; Bolla Raffaele; Bruschi Roberto; Carrega Alessandro

? Keywords: Energy consumption | Energy-efficient network management | Green abstraction layer | Network functions virtualization | Power management primitives | Software defined networking

? Source Id: 21100805008

? Author Ids: 36872674700;57218403122;57220364548;7006403406;8555973600;36633941300

? Authoraffiliationids: 60012689-60098468;60012689-60014264;60025153-60103966;60025153-60103966;60103966;60025153-60103966

? Corresponding: Jarschel M.

42.

? Title: Green networking with packet processing engines: Modeling and optimization

? Venue: IEEE ACM Transactions on Networking

? Year: 2014

? Type: Journal

? Subtype: Article

? Citations: 48

? Doi: 10.1109/Tnet.2013.2242485

? Scopus ID: 2-s2.0-84873962195

? Issn: 10636692

? Volume: 22

? Issue: 1

? Pages: 110-123

? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco

? Keywords: Adaptive rate | Forwarding engine | Green networking | Low power idle | Multipipeline

? Quartile:

2014:

? Electrical and Electronic Engineering (Q1, rank 56, percentile 91)

? Computer Science Applications (Q1, rank 48, percentile 90)

? Computer Networks and Communications (Q1, rank 23, percentile 90)

? Software (Q1, rank 44, percentile 88)

? Source Id: 27237

? Author Ids: 7006403406;8555973600;36633941300;57220364548

? Authoraffiliationids: ;60103966;;

? Corresponding: Bolla R.

43.

? Title: A closed-form model for the IEEE 802.3az network and power performance

? Venue: IEEE Journal on Selected Areas in Communications

? Year: 2014

? Type: Journal

? Subtype: Article

? Citations: 21
? Doi: 10.1109/Jsac.2014.140103
? Scopus ID: 2-s2.0-84891602988
? Issn: 07338716
? Volume: 32
? Issue: 1
? Pages: 16-27
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Lago Paolo
? Keywords: Energy management | Ethernet networks | Queue modeling
? Quartile:
2025:
? Computer Networks and Communications (Q1, rank 4, percentile 99)
? Electrical and Electronic Engineering (Q1, rank 8, percentile 99)
2014:
? Computer Networks and Communications (Q1, rank 4, percentile 98)
? Electrical and Electronic Engineering (Q1, rank 12, percentile 98)
? Source Id: 18902
? Author Ids: 7006403406;8555973600;36633941300;57220364548;55757292600
? Authoraffiliationids: 60025153;60025153;60025153;60025153;60025153
? Corresponding: Bolla R.

44.

? Title: Traffic merging for energy-efficient datacenter networks
? Venue: Simulation Series
? Year: 2012
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 1
? Scopus ID: 2-s2.0-84870487685
? Issn: 07359276
? Volume: 44
? Issue: Book 12
? Pages: 8-12
? Authors: Carrega Alessandro; Singh Suresh; Bruschi Roberto; Bolla Raffaele
? Quartile:
2025:
? Computer Networks and Communications (Q4, rank 535, percentile 2)
? Source Id: 12193
? Author Ids: 36633941300;57202910580;8555973600;7006403406
? Authoraffiliationids: 60025153;60023908;60103966;60025153
? Corresponding: Carrega A.

45.

? Title: Traffic merging for energy-efficient datacenter networks
? Venue: Proceedings of the 2012 International Symposium on Performance Evaluation of Computer and Telecommunication Systems Spects 12 Part of Summersim 2012 Multiconference
? Year: 2012
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 14
? Scopus ID: 2-s2.0-84866989182
? Authors: Carrega Alessandro; Singh Suresh; Bruschi Roberto; Bolla Raffaele
? Source Id: 21100216999
? Author Ids: 36633941300;57202910580;8555973600;7006403406
? Authoraffiliationids: 60025153;60023908;60103966;60025153

? Corresponding: Carrega A.

46.

? Title: Cutting the energy bills of Internet Service Providers and telecoms through power management: An impact analysis

? Venue: Computer Networks

? Year: 2012

? Type: Journal

? Subtype: Article

? Citations: 76

? DOI: 10.1016/j.comnet.2012.04.003

? Scopus ID: 2-s2.0-84862013433

? Issn: 13891286

? Volume: 56

? Issue: 10

? Pages: 2320-2342

? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco; Suino Diego; Vassilakis Constantin; Zafeiropoulos Anastasios

? Keywords: Energy saving | Green networking | Impact model | Power management

? Quartile:

2025:

? Computer Networks and Communications (Q1, rank 96, percentile 82)

2012:

? Computer Networks and Communications (Q1, rank 40, percentile 80)

? Source Id: 26811

? Author Ids:

7006403406;8555973600;36633941300;57220364548;7801389022;55627877790;24333644200

? Authoraffiliationids:

60025153;60025153;60025153;60025153;60023916;101742284;101742284

? Corresponding: Bolla R.

47.

? Title: Applying traffic merging to datacenter networks

? Venue: Proceedings of the 3rd International Conference on Future Energy Systems Where Energy Computing and Communication Meet E Energy 2012

? Year: 2012

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 12

? Doi: 10.1145/2208828.2208831

? Scopus ID: 2-s2.0-84861550699

? Authors: Carrega Alessandro; Singh Suresh; Bolla Raffaele; Bruschi Roberto

? Keywords: Design | Experimentation

? Source Id: 21100202903

? Author Ids: 36633941300;57202910580;7006403406;8555973600

? Authoraffiliationids: 60025153;60023908;60025153;60103966

? Corresponding: Carrega A.

48.

? Title: Green network technologies and the art of trading-off

? Venue: 2011 IEEE Conference on Computer Communications Workshops INFOCOM Wkshps 2011

? Year: 2011

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 32

? Doi: 10.1109/Infcomw.2011.5928827

? Scopus ID: 2-s2.0-79960594927

? Pages: 301-306
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco
? Keywords: adaptive rate | green networking | low power idle
? Source Id: 19900192532
? Author Ids: 7006403406;8555973600;36633941300;57220364548
? Authoraffiliationids: 60025153;60103966;60025153;60025153
? Corresponding: Bolla R.

49.

? Title: Power scaling in network devices
? Venue: Proceedings of the ACM Conext Student Workshop Conext 2010
? Year: 2010
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 0
? Doi: 10.1145/1921206.1921216
? Scopus ID: 2-s2.0-79955955548
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro
? Source Id: 19800188026
? Author Ids: 7006403406;8555973600;36633941300
? Authoraffiliationids: 60025153;60103966;60025153
? Corresponding: Bolla R.

50.

? Title: Theoretical and technological limitations of power scaling in network devices
? Venue: 2010 Australasian Telecommunication Networks and Applications Conference Atnac 2010
? Year: 2010
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 12
? Doi: 10.1109/Atnac.2010.5680253
? Scopus ID: 2-s2.0-79251583198
? Pages: 37-42
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco
? Keywords: Dynamic power scaling | Green networking | Power management
? Source Id: 19700187509
? Author Ids: 7006403406;8555973600;36633941300;57220364548
? Authoraffiliationids: 60025153;60103966;60025153;60025153
? Corresponding: Bolla R.

51.

? Title: GreenSim: An open source tool for evaluating the energy savings through resource dynamic adaptation
? Venue: Proceedings of the 2010 International Symposium on Performance Evaluation of Computer and Telecommunication Systems SpectS 2010
? Year: 2010
? Type: Conference Proceeding
? Subtype: Conference Paper
? Citations: 2
? Scopus ID: 2-s2.0-78649264193
? Pages: 89-95
? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro
? Keywords: Burst analysis | Green simulator | Networking | Packet processing engine | Performance evaluation | Simulation
? Source Id: 19700182432
? Author Ids: 7006403406;8555973600;36633941300

? Authoraffiliationids: 60025153;60103966;60025153

? Corresponding: Bolla R.

52.

? Title: An analytical model for designing and controlling new-generation green devices

? Venue: 2010 IEEE Globecom Workshops GC 10

? Year: 2010

? Type: Conference Proceeding

? Subtype: Conference Paper

? Citations: 7

? Doi: 10.1109/Glocomw.2010.5700166

? Scopus ID: 2-s2.0-79951936971

? Pages: 1388-1393

? Authors: Bolla Raffaele; Bruschi Roberto; Carrega Alessandro; Davoli Franco

? Keywords: Green networks | Low power idle | Power scaling

? Source Id: 19700188271

? Author Ids: 7006403406;8555973600;36633941300;57220364548

? Authoraffiliationids: 60025153;60025153;60025153;60025153

? Corresponding: Bolla R.