# Roberto Casadei

List of Publications by Year
in descending order

| 40 papers | 668 citations | 686830 13 h-index | 676716 22 g-index |
|---|---|---|---|
| 41 all docs | 41 docs citations | 41 times ranked | 424 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Digital Twins, Virtual Devices, and Augmentations for Self-Organising Cyber-Physical Collectives. Applied Sciences (Switzerland), 2022, 12, 349. | 1.3 | 9 |
| 2 | A Methodology and Simulation-Based Toolchain for Estimating Deployment Performance of Smart Collective Services at the Edge. IEEE Internet of Things Journal, 2022, 9, 20136-20148. | 5.5 | 12 |
| 3 | Towards Reinforcement Learning-based Aggregate Computing. Lecture Notes in Computer Science, 2022, , 72-91. | 1.0 | 9 |
| 4 | A Collective Adaptive Approach to Decentralised k-Coverage in Multi-robot Systems. ACM Transactions on Autonomous and Adaptive Systems, 2022, 17, 1-39. | 0.4 | 4 |
| 5 | Partitioned integration and coordination via the self-organising coordination regions pattern. Future Generation Computer Systems, 2021, 114, 44-68. | 4.9 | 36 |
| 6 | Engineering collective intelligence at the edge with aggregate processes. Engineering Applications of Artificial Intelligence, 2021, 97, 104081. | 4.3 | 36 |
| 7 | Tuple-Based Coordination in Large-Scale Situated Systems. Lecture Notes in Computer Science, 2021, , 149-167. | 1.0 | 3 |
| 8 | ScaFi-Web: A Web-Based Application for Field-Based Coordination Programming. Lecture Notes in Computer Science, 2021, , 285-299. | 1.0 | 5 |
| 9 | A Programming Approach to Collective Autonomy. Journal of Sensor and Actuator Networks, 2021, 10, 27. | 2.3 | 5 |
| 10 | Adaptive distributed monitors of spatial properties for cyber–physical systems. Journal of Systems and Software, 2021, 175, 110908. | 3.3 | 24 |
| 11 | Augmented Collective Digital Twins for Self-Organising Cyber-Physical Systems. , 2021, , . | | 2 |
| 12 | Towards Integration of Multi-Agent Planning with Self-Organising Collective Processes. , 2021, , . | | 6 |
| 13 | Fostering resilient execution of multi-agent plans through self-organisation. , 2021, , . | | 8 |
| 14 | Towards Pulverised Architectures for Collective Adaptive Systems through Multi-Tier Programming. , 2021, , . | | 1 |
| 15 | Optimal resilient distributed data collection in mobile edge environments. Computers and Electrical Engineering, 2021, 96, 107580. | 3.0 | 13 |
| 16 | Pulverization in Cyber-Physical Systems: Engineering the Self-Organizing Logic Separated from Deployment. Future Internet, 2020, 12, 203. | 2.4 | 25 |
| 17 | On the Social Implications of Collective Adaptive Systems. IEEE Technology and Society Magazine, 2020, 39, 36-46. | 0.6 | 8 |
| 18 | Collective Adaptive Systems as Coordination Media: The Case of Tuples in Space-Time. , 2020, , . | | 1 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 19 | FScaFi : A Core Calculus for Collective Adaptive Systems Programming. Lecture Notes in Computer Science, 2020, , 344-360. | 1.0 | 15 |
| 20 | Security in Collective Adaptive Systems: A Roadmap. , 2019, , . | | 4 |
| 21 | From distributed coordination to field calculus and aggregate computing. Journal of Logical and Algebraic Methods in Programming, 2019, 109, 100486. | 0.4 | 44 |
| 22 | Coordinating Computation at the Edge: a Decentralized, Self-Organizing, Spatial Approach. , 2019, , . | | 19 |
| 23 | Engineering Resilient Collaborative Edge-Enabled IoT. , 2019, , . | | 6 |
| 24 | Self-organising Coordination Regions: A Pattern for Edge Computing. Lecture Notes in Computer Science, 2019, , 182-199. | 1.0 | 16 |
| 25 | A development approach for collective opportunistic Edge-of-Things services. Information Sciences, 2019, 498, 154-169. | 4.0 | 60 |
| 26 | On Context-Orientation in Aggregate Programming. , 2019, , . | | 0 |
| 27 | Modelling and simulation of Opportunistic IoT Services with Aggregate Computing. Future Generation Computer Systems, 2019, 91, 252-262. | 4.9 | 121 |
| 28 | Aggregate Processes in Field Calculus. Lecture Notes in Computer Science, 2019, , 200-217. | 1.0 | 11 |
| 29 | Collective Abstractions and Platforms for Large-Scale Self-Adaptive IoT. , 2018, , . | | 7 |
| 30 | Transparent Protection of Aggregate Computations from Byzantine Behaviours via Blockchain. , 2018, , . | | 5 |
| 31 | Towards attack-resistant Aggregate Computing using trust mechanisms. Science of Computer Programming, 2018, 167, 114-137. | 1.5 | 21 |
| 32 | From Field-Based Coordination to Aggregate Computing. Lecture Notes in Computer Science, 2018, , 252-279. | 1.0 | 15 |
| 33 | Programming Actor-Based Collective Adaptive Systems. Lecture Notes in Computer Science, 2018, , 94-122. | 1.0 | 13 |
| 34 | Combining Trust and Aggregate Computing. Lecture Notes in Computer Science, 2018, , 507-522. | 1.0 | 4 |
| 35 | Compositional Blocks for Optimal Self-Healing Gradients. , 2017, , . | | 31 |
| 36 | On execution platforms for large-scale aggregate computing. , 2016, , . | | 18 |

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|---|---------|-----|-----------|
| 37 | Towards Aggregate Programming in Scala. , 2016, , . | | 11 |
| 38 | Run-Time Management of Computation Domains in Field Calculus. , 2016, , . | | 7 |
| 39 | Simulating Large-scale Aggregate MASs with Alchemist and Scala. , 0, , . | | 20 |
| 40 | Time-Fluid Field-Based Coordination through Programmable Distributed Schedulers. Logical Methods in Computer Science, 0, Volume 17, Issue 4, . | 0.4 | 12 |