Vittorio Rosato

List of Publications by Year
in descending order

82	4,286	361413 20	106344 65
papers	citations	h-index	g-index

88	88	88	2547
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Preventing and Managing Risks Induced by Natural Hazards to Critical Infrastructures. Infrastructures, 2022, 7, 76.	2.8	3
2	REAL-TIME ASSESSMENT OF PERFORMANCE INDICATORS FOR BRIDGES TO SUPPORT ROAD NETWORK MANAGEMENT IN THE AFTERMATHS OF EARTHQUAKE EVENTS. , 2021, , .		3
3	Operational Resilience Metrics for Complex Inter-Dependent Electrical Networks. Applied Sciences (Switzerland), 2021, 11, 5842.	2.5	4
4	Assessing Earthquake Impacts and Monitoring Resilience of Historic Areas: Methods for GIS Tools. ISPRS International Journal of Geo-Information, 2021, 10, 461.	2.9	16
5	A comprehensive system for semantic spatiotemporal assessment of risk in urban areas. Journal of Contingencies and Crisis Management, 2020, 28, 178-193.	2.8	12
6	Assessing Earthquake-Induced Urban Rubble by Means of Multiplatform Remotely Sensed Data. ISPRS International Journal of Geo-Information, 2020, 9, 262.	2.9	7
7	Earthquake Simulation on Urban Areas: Improving Contingency Plans by Damage Assessment. Lecture Notes in Computer Science, 2019, , 72-83.	1.3	4
8	A Decision Support System for mitigating the seismic risk of electric distribution networks: learnings from the Central Italy earthquake sequence 2016â€“2017. , 2019, , .		0
9	Operational Resilience Metrics for a Complex Electrical Network. Lecture Notes in Computer Science, 2018, , 60-71.	1.3	4
10	A Geospatial Decision Support Tool for Seismic Risk Management: Florence (Italy) Case Study. Lecture Notes in Computer Science, 2017, , 278-293.	1.3	14
11	Towards a Decision Support Tool for Assessing, Managing and Mitigating Seismic Risk of Electric Power Networks. Lecture Notes in Computer Science, 2017, , 399-414.	1.3	12
12	Simulation of Cascading Outages in (Inter)-Dependent Services and Estimate of Their Societal Consequences. Lecture Notes in Computer Science, 2017, , 340-345.	1.3	1
13	A Decision Support System for Emergency Management of Critical Infrastructures Subjected to Natural Hazards. Lecture Notes in Computer Science, 2016, , 362-367.	1.3	4
14	Design of DSS for Supporting Preparedness to and Management of Anomalous Situations in Complex Scenarios. Studies in Systems, Decision and Control, 2016, , 195-232.	1.0	18
15	Critical Infrastructure Disruption Scenarios Analyses via Simulation. Studies in Systems, Decision and Control, 2016, , 43-61.	1.0	9
16	Advanced services for critical infrastructures protection. Journal of Ambient Intelligence and Humanized Computing, 2015, 6, 783-795.	4.9	20
17	Semantic Modeling of the Emissions Trading System. , 2013, , .		0
18	Towards ontological foundations of knowledge related to the emissions trading system. , 2013, , .		1

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19	The Contribution of NEISAS to EP3R. Lecture Notes in Computer Science, 2013, , 175-186.	1.3	2
20	A DOMAIN SPECIFIC LANGUAGE FOR THE DESCRIPTION AND THE SIMULATION OF SYSTEMS OF INTERACTING SYSTEMS. International Journal of Modeling, Simulation, and Scientific Computing, 2012, 15, 1250072.	1.4	5
21	Inter-System Software Adapter for Decision Support by Interfacing Disaster Response Platforms & Simulation Platforms. , 2012, , .		1
22	Stability of a model of power microgeneration network using the Kuramoto model. International Journal of System of Systems Engineering, 2010, 2, 76.	0.5	1
23	Interdependency Effects Measured on Complex Interdependent Networks. , 2010, , .		0
24	On Modelling of Inter-dependent Network Infrastructures by Extended Leontief Models. Lecture Notes in Computer Science, 2010, , 1-13.	1.3	6
25	Atomic-Scale Modeling of the Interaction between Short Polypeptides and Carbon Surfaces. Journal of Physical Chemistry B, 2009, 113, 12105-12112.	2.6	34
26	Stability of a Distributed Generation Network Using the Kuramoto Models. Lecture Notes in Computer Science, 2009, , 14-23.	1.3	12
27	Is the topology of the Internet network really fit to sustain its function?. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 1689-1704.	2.6	24
28	Structure and dynamics of the anti-AMCV scFv(F8): Effects of selected mutations on the antigen combining site. Journal of Structural Biology, 2008, 164, 119-133.	2.8	21
29	Modelling interdependent infrastructures using interacting dynamical models. International Journal of Critical Infrastructures, 2008, 4, 63.	0.2	392
30	A Complex Systemâ€™s View of Critical Infrastructures. , 2008, , 241-260.		2
31	Critical Infrastructures Vulnerability: The Highway Networks. , 2008, , 201-216.		7
32	Role of defective icosahedra in undercooled copper. Physical Review B, 2007, 75, .	3.2	24
33	Asymptotic states and topological structure of an activationâ€“deactivation chemical network. Journal of Theoretical Biology, 2007, 245, 423-432.	1.7	1
34	A fine functional homology between chitinases from host and parasite is relevant for malaria transmissibility. Parasitology Research, 2007, 101, 639-645.	1.6	6
35	Topological properties of high-voltage electrical transmission networks. Electric Power Systems Research, 2007, 77, 99-105.	3.6	131
36	Parameter estimate of signal transduction pathways. BMC Neuroscience, 2006, 7, S6.	1.9	19

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37	Astrocomp: web technologies for high performance computing on a network of supercomputers. Computer Physics Communications, 2005, 166, 17-25.	7.5	3
38	Evidence for cystine clustering in thermophilic proteomes. Trends in Genetics, 2003, 19, 607-608.	6.7	1
39	Designing hardware for protein sequence analysis. Bioinformatics, 2003, 19, 1739-1740.	4.1	17
40	Atomic hydrogen adsorption on a Stoneâ€“Wales defect in graphite. Surface Science, 2002, 496, 33-38.	1.9	55
41	Evidence for cysteine clustering in thermophilic proteomes. Trends in Genetics, 2002, 18, 278-281.	6.7	33
42	Evaluation of communicative and functional abilities in Wolf-Hirshhorn syndrome. Journal of Intellectual Disability Research, 2002, 46, 575-582.	2.0	8
43	Atomistic simulation of liquid lead and leadâ€“bismuth eutectic. Journal of Nuclear Materials, 2002, 301, 64-69.	2.7	14
44	Thermodynamic behavior of a carbon schwarzite. Computational Materials Science, 2001, 20, 387-393.	3.0	7
45	Ab-initio modelling of atomic and molecular Hydrogen adsorption in graphite. Materials Research Society Symposia Proceedings, 2001, 677, 4111.	0.1	0
46	Ab-initio modelling of atomic and molecular Hydrogen adsorption in graphite. Materials Research Society Symposia Proceedings, 2001, 677, 471.	0.1	1
47	On the Use of a Heterogeneous MIMDâ€“SIMD Platform to Simulate the Dynamics of Globular Clusters with a Central Massive Object. Journal of Computational Physics, 2001, 174, 208-225.	3.8	3
48	Dedicated hardware for linearly-scaling algorithms in condensed-matter physics. Computer Physics Communications, 2001, 139, 20-33.	7.5	0
49	Static atomic displacements in Ni-rich Ni-Al. Europhysics Letters, 2001, 54, 482-487.	2.0	5
50	Defect energetics, thermal stability and localized electronic states in carbon nanotubes. Materials Research Society Symposia Proceedings, 2000, 633, 1481.	0.1	2
51	The study of the microscopic scale structure of carbon-based materials: a comparison between Auger-derived density of states structures and molecular dynamics simulations. Surface Science, 2000, 467, 139-151.	1.9	8
52	Analysis of the electronic structure of hydrogenated amorphous carbon via Auger spectroscopy. Applied Surface Science, 1999, 152, 10-18.	6.1	18
53	An high performance Fortran implementation of a Tight-Binding Molecular Dynamics simulation. Computer Physics Communications, 1999, 120, 255-268.	7.5	4
54	Thermodynamic behavior of the carbon schwarzite fcc(C36)2. Physical Review B, 1999, 60, 16928-16933.	3.2	42

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55	Mechanical alloying of immiscible elements: Experimental results on Agâ€'Cu and Coâ€'Cu. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1997, 76, 651-662.	0.6	14
56	Molecular-dynamics calculations of thermodynamic properties of metastable alloys. Physical Review B, 1997, 55, 837-842.	3.2	57
57	Mechanical Instability of Oxidized Metal Clusters. Physical Review Letters, 1996, 77, 2495-2498.	7.8	10
58	Atomic model of a palladium nanostructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 204, 101-106.	5.6	6
59	Atomic simulation of a palladium nanophase. Scripta Materialia, 1995, 6, 751-754.	0.5	8
60	Volume distribution of empty regions in disordered structures. Computational Materials Science, 1995, 3, 359-367.	3.0	2
61	Simulation of growth of Ni-Zr interfacial amorphous regions under nonequilibrium conditions. Physical Review B, 1994, 50, 2850-2857.	3.2	33
62	Atomistic simulation of the interaction of slow protons with an iron surface. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1993, 15, 1263-1272.	0.4	0
63	Phase stability of Niâ€"Al solid solutions. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 68, 845-851.	0.6	6
64	Order-disorder transition inCu3Au: A combined molecular-dynamics and cluster-variation-method approach. Physical Review B, 1993, 47, 14541-14544.	3.2	24
65	Tight-binding potentials for transition metals and alloys. Physical Review B, 1993, 48, 22-33.	3.2	1,748
66	Experimental and theoretical investigation of the order-disorder transformation in Ni₃Al. Journal of Materials Research, 1993, 8, 2504-2509.	2.6	36
67	The role of chemical disorder and volume expansion in crystal-to-amorphous transitions: simulation results for NiZr2 and Cu3Au. Journal of Alloys and Compounds, 1993, 194, 439-445.	5.5	10
68	Lattice dynamics of ordered and disordered Cu₃Au with a tight-binding potential model. Philosophical Magazine Letters, 1993, 67, 369-378.	1.2	24
69	A molecular dynamics simulation of the effects of excess free volume on the diffusion in metallic glasses. Journal of Non-Crystalline Solids, 1992, 144, 187-195.	3.1	10
70	Deuterium clusters in a strained palladium lattice. Journal of Materials Research, 1990, 5, 2094-2099.	2.6	1
71	Molecular dynamics calculations for low-energy helium atoms on a nickel surface. Journal of Physics Condensed Matter, 1989, 1, 10021-10037.	1.8	6
72	A molecular dynamics model for the study of helium on transition metals. Computer Physics Communications, 1989, 54, 251-256.	7.5	2

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73	Comparative behavior of carbon in b.c.c. and f.c.c. iron. Acta Metallurgica, 1989, 37, 2759-2763.	2.1	58
74	Thermodynamical and structural properties of f.c.c. transition metals using a simple tight-binding model. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1989, 59, 321-336.	0.6	990
75	Structural and thermodynamical behaviour of a solid surface under stress: a molecular dynamics study. Journal of Physics C: Solid State Physics, 1987, 20, 1231-1240.	1.5	1
76	Molecular-dynamics study of surface premelting effects. Physical Review B, 1986, 33, 1860-1870.	3.2	136
77	Roughening transition on the (110) face of argon: A molecular dynamics study. Surface Science, 1985, 162, 150-155.	1.9	18
78	Interfacial free energy of a two-dimensional bicrystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 100, 195-197.	2.1	5
79	Dynamic Kerr-effect and dielectric relaxation of polarizable dipolar molecules. Transient response including linear and non-linear effects. Journal of the Chemical Society, Faraday Transactions 2, 1981, 77, 1767.	1.1	21
80	A multi-state barrier model for the multiple dielectric relaxations of bulk amorphous polymers and related glass-forming systems. Advances in Molecular Relaxation and Interaction Processes, 1981, 20, 233-248.	0.5	5
81	Modeling Resilience in Electrical Distribution Networks. , 0, , .		7
82	Integrating Resilience in Time-based Dependency Analysis: A Large-Scale Case Study for Urban Critical Infrastructures. , 0, , .		4