## Sergio Caracciolo

## List of Publications by Year in descending order

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1 Polymers and g|ï†|4 theory in four dimensions. Nuclear Physics B, 1983, 215, 209-248.

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Asymptotic Scaling in the Two-Dimensional O(3) Ïf Model at Correlation Length 105. Physical Review
2.9 Letters, 1995, 75, 1891-1894.
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6 3d Ising Spin-Glasses in a Magnetic Field and Mean-Field Theory. Europhysics Letters, 1990, 11, 783-789.
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7 A new Monte-Carlo approach to the critical properties of self-avoiding random walks. Journal De
Physique, 1983, 44, 323-331.
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8 Wolff-type embedding algorithms for general nonlinear Ïf-models. Nuclear Physics B, 1993, 403, 475-541.
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9 High-precision determination of the critical exponent $\hat{1} 3$ for self-avoiding walks. Physical Review E, 1998,
57, R1215-R1218.

10 The energy-momentum tensor for lattice gauge theories. Annals of Physics, 1990, 197, 119-153.
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11 Low temperature behaviour of 3-D spin glasses in a magnetic field. Journal De Physique, 1990, 51,
1877-1895.
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12 Nonlocal Monte Carlo algorithm for self-avoiding walks with fixed endpoints. Journal of Statistical
Physics, 1990, 60, 1-53.
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13 Fermionic Field Theory for Trees and Forests. Physical Review Letters, 2004, 93, 080601.
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14 Scaling hypothesis for the Euclidean bipartite matching problem. Physical Review E, 2014, 90, 012118.
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> 15 Correction-to-Scaling Exponents for Two-Dimensional Self-Avoiding Walks. Journal of Statistical
> Physics, 2005, 120, 1037-1100.
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Virial coefficients and osmotic pressure in polymer solutions in good-solvent conditions. Journal of Chemical Physics, 2006, 125, 094903.
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17 Corrections to finite-size scaling in the latticeN-vector model forN=â^ž. Physical Review D, 1998, 58, .
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Lattice perturbation theory for $\mathrm{O}(\mathrm{N})$-symmetric Ï $f$-models with general nearest-neighbour action (I).
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Four-loop perturbative expansion for the lattice N-vector model. Nuclear Physics B, 1995, 455, 619-647.
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Geometrical properties of two-dimensional interacting self-avoiding walks at the $\hat{l}_{s}$-point. Journal of
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23 The energy-momentum tensor on the lattice: The scalar case. Nuclear Physics B, 1988, 309, 612-624.
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Dynamic critical exponent of some Monte Carlo algorithms for the self-avoiding walk. Journal of
Physics A, 1986, 19, L797-L805.
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25 Scaling hypothesis for the Euclidean bipartite matching problem. II. Correlation functions. Physical
Review E, 2015, 91, 062125.
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26 Finite-Size Scaling in the Driven Lattice Gas. Journal of Statistical Physics, 2004, 115, 281-322.
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27 Algebraic/combinatorial proofs of Cayley-type identities for derivatives of determinants and pfaffians.
Advances in Applied Mathematics, 2013, 50, 474-594.

Universal distance ratios for two-dimensonal self-avoiding walks: corrected conformal-invariance predictions. Journal of Physics A, 1990, 23, L969-L974.
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$\square$31 End-to-end distribution function for dilute polymers. Journal of Chemical Physics, 2000, 112, 7693-7710.1.221

Join- and-cut algorithm for self-avoiding walks with variable length and free endpoints. Journal of
Statistical Physics, 1992, 67, 65-111.

Random walks with short-range interaction and mean-field behavior. Journal of Statistical Physics,
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Improved Migdal recursion formula for the Ising model in two dimensions on a triangular lattice.
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A quantitative analysis of the Migdal-Kadanoff renormalization scheme for $\operatorname{SU}(2)$ gauge theory.
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Comment on â€œDynamic Behavior of Anisotropic Nonequilibrium Driving Lattice Gasesâ€: Physical Review
Letters, 2004, 92, 029601; author reply 029602.

Grassmann integral representation for spanning hyperforests. Journal of Physics A: Mathematical and
Theoretical, 2007, 40, 13799-13835.

Third Virial Coefficient for 4â€Arm and 6â€Arm Star Polymers. Macromolecular Theory and Simulations, 2008, 17, 67-72.

49 Conservation laws for strings in the Abelian Sandpile Model. Europhysics Letters, 2010, 90, 60003.
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Mechanics: Theory and Experiment, 2012, 2012, P09013.

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51 Title is missing!. Journal of Physics A, 1991, 24, 3625-3639. 1.6 ..... 4
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European Physical Journal B, 2003, 34, 205-217.
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Two-parameter model predictions and $\hat{l}_{5}$ point crossover for linear-polymer solutions. Journal ofChemical Physics, 2008, 128, 065104.
63 Noncommutative determinants, Cauchy\–Binet formulae, and Capelli-type identities I.
Generalizations of the Capelli and Turnbull identities. Electronic Journal of Combinatorics, 2009, 16, . ..... 0.212
Monte Carlo test of a hyperscaling relation for the two-dimensional self-avoiding walk. Journal ofPhysics A, 1987, 20, 2569-2576.
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65 two-dimensional $N$-vector model for $N=3,4,8$. Nuclear Physics, Section B, Proceedings Supplements, 0.5 ..... 11 1996, 47, 763-766.66 Critical behavior of the two-dimensional randomly driven lattice gas. Physical Review E, 2005, 72,0.811
056111.1.211Multiple and inverse topplings in the Abelian Sandpile Model. European Physical Journal: Special1.2Topics, 2012, 212, 23-44.Growth and form of melanoma cell colonies. Journal of Statistical Mechanics: Theory and
$73 \begin{aligned} & \text { Renormalization flow for unrooted forests on a triangular lattice. Nuclear Physics B, 2007, 787, } \\ & 260-282 \text {. }\end{aligned}$ 2,

Generalized Wolff-type embedding algorithms for nonlinear Ïf-models. Nuclear Physics, Section B, Proceedings Supplements, 1991, 20, 72-75.

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Solution for a bipartite Euclidean traveling-salesman problem in one dimension. Physical Review E, 2018, 97, 052109.

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82 Spanning Forests on Random Planar Lattices. Journal of Statistical Physics, 2009, 135, 1063-1104.
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Monte Carlo test of a hyperscaling relation for the two-dimensional self-avoiding walk. II. Journal of Physics A, 1990, 23, 4509-4517.

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Crossover scaling from classical to non-classical critical behaviour. Nuclear Physics, Section B,
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sigma-model. Journal of High Energy Physics, 2000, 2000, 045-045.
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Bogoliubov transformations and fermion condensates in lattice field theories. Annals of Physics,
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Dynamic critical behaviour of Wolff's algorithm for RPN Ïf-models. Nuclear Physics, Section B,
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| 96 | The Dyck bound in the concave 1-dimensional random assignment model. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 064001. | 0.7 | 6 |
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| 99 | A free action for pions as quark composites. Nuclear Physics B, 1998, 512, 505-519. | 0.9 | 5 |
| 100 | Hyperforests on the complete hypergraph by Grassmann integral representation. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 205003. | 0.7 | 5 |
| 101 | Diquarks in the nilpotency expansion of QCD and their role at finite chemical potential. Physical Review D, 2012, 85, . | 1.6 | 5 |
| 102 | Spanning forests and<i>OSP<\|i>(<i>N<\|i>|<i>2M<\|i>)â€\%-invariant<i>Ïf<\|i>-models.Journal of Physics A: Mathematical and Theoretical, 2017, 50, 114001. | 0.7 | 5 |
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Critical behaviour of spanning forests on random planar graphs. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 074003.

Plastic number and possible optimal solutions for an Euclidean 2-matching in one dimension. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 083402.
115 Random Assignment Problems on 2d Manifolds. Journal of Statistical Physics, 2021, 183, 1. ..... 0.5
Phase transitions and renormalized structure of lattice gauge theories with fermions. PhysicsLetters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1978, 77, 275-278.
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Section B, Proceedings Supplements, 1997, 53, 794-796. | Use of even grassmann variables to construct effective actions for mesons. Nuclear Physics, Section |
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| 130 B, Proceedings Supplements, 1998, 63, 790-792. |133 Phase transition in the spanning-hyperforest model on complete hypergraphs. Nuclear Physics B, 2009,

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134 Chiral symmetry breaking and quark confinement in the nilpotency expansion of QCD. Physical ReviewD, 2011, 83,
135 Transfer matrix for Kogut-Susskind fermions in the spin basis. Physical Review D, 2013, 87, . ..... 1.6 ..... 2
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137 Deterministic Abelian Sandpile and Square-Triangle Tilings. Springer INdAM Series, 2015, , 127-136. 0.4 ..... 2
Accurate results for the near critical properties of the Ising and non-linear Ïf-models by theintroduction of a potential shift. Nuclear Physics B, 1983, 225, 466-474.
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| 145 | Noncommutative determinants, Cauchy-Binet formulae, and Capelli-type identities II. Grassmann and quantum oscillator algebra representation. Annales De L'Institut Henri Poincare (D) Combinatorics, Physics and Their Interactions, 2014, 1, 1-46. | 0.6 | 1 |
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| 146 | Current quantization and fractal hierarchy in a driven repulsive lattice gas. Physical Review E, 2017, 96, 052141. | 0.8 | 1 |
| 147 | Average optimal cost for the Euclidean TSP in one dimension. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 264003. | 0.7 | 1 |
| 148 | The Number of Optimal Matchings for Euclidean Assignment on the Line. Journal of Statistical Physics, 2021, 183, 1. | 0.5 | 1 |
| 149 | From Lattice Gauge Theory Towards Gravity. NATO ASI Series Series B: Physics, 1990, , 37-54. | 0.2 | 1 |
| 150 | Ising spin-glasses in a magnetic field in 3 dimensions. Nuclear Physics, Section B, Proceedings Supplements, 1990, 17, 577-580. | 0.5 | 0 |
| 151 | The trace anomaly and the energy momentum tensor in lattice gauge theories. Nuclear Physics, Section B, Proceedings Supplements, 1990, 16, 557-558. | 0.5 | 0 |
| 152 | Analytic determination of dimension-4 composite operators in QCD. Nuclear Physics, Section B, Proceedings Supplements, 1992, 26, 409-411. | 0.5 | 0 |
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