

# Dhagash Mehta

## List of Publications by Year in descending order

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45  
papers

957  
citations

393982

19  
h-index

476904

29  
g-index

45  
all docs

45  
docs citations

45  
times ranked

584  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy landscapes for machine learning. Physical Chemistry Chemical Physics, 2017, 19, 12585-12603.	1.3	71
2	Finding all the stationary points of a potential-energy landscape via numerical polynomial-homotopy-continuation method. Physical Review E, 2011, 84, 025702.	0.8	62
3	Numerical polynomial homotopy continuation method to locate all the power flow solutions. IET Generation, Transmission and Distribution, 2016, 10, 2972-2980.	1.4	60
4	Phase Transitions Detached from Stationary Points of the Energy Landscape. Physical Review Letters, 2011, 107, 160602.	2.9	46
5	Algebraic geometrization of the Kuramoto model: Equilibria and stability analysis. Chaos, 2015, 25, 053103.	1.0	45
6	Phase transitions and gluodynamics in 2-colour matter at high density. European Physical Journal A, 2013, 49, 1.	1.0	40
7	Finding all flux vacua in an explicit example. Journal of High Energy Physics, 2013, 2013, 1.	1.6	38
8	Recent advances in computational methods for the power flow equations. , 2016, , .		38
9	Numerical Polynomial Homotopy Continuation Method and String Vacua. Advances in High Energy Physics, 2011, 2011, 1-15.	0.5	35
10	Numerical algebraic geometry: a new perspective on gauge and string theories. Journal of High Energy Physics, 2012, 2012, 1.	1.6	35
11	Tumbling through a landscape: Evidence of instabilities in high-dimensional moduli spaces. Physical Review D, 2013, 88, .	1.6	35
12	Stationary point analysis of the one-dimensional lattice Landau gauge fixing functional, aka random phase XY Hamiltonian. Annals of Physics, 2011, 326, 1425-1440.	1.0	34
13	Energy-landscape analysis of the two-dimensional nearest-neighbor $\mathbb{Z}_2$ model. Physical Review E, 2012, 85, 061103.	0.8	33
14	Enumerating Gribov copies on the lattice. Annals of Physics, 2013, 331, 188-215.	1.0	33
15	On the sign problem in 2D lattice super Yang-Mills. Journal of High Energy Physics, 2012, 2012, 1.	1.6	26
16	Energy landscape of the finite-size spherical three-spin glass model. Physical Review E, 2013, 87, 052143.	0.8	23
17	On the Network Topology Dependent Solution Count of the Algebraic Load Flow Equations. IEEE Transactions on Power Systems, 2018, 33, 1451-1460.	4.6	23
18	Phase structure of lattice $\mathcal{N}=4$ super Yang-Mills. Journal of High Energy Physics, 2012, 2012, 1.	1.6	22

#	ARTICLE	IF	CITATIONS
19	Exploring the potential energy landscape over a large parameter-space. Journal of High Energy Physics, 2013, 2013, 1.	1.6	21
20	Kinetic Transition Networks for the Thomson Problem and Smale's Seventh Problem. Physical Review Letters, 2016, 117, 028301.	2.9	21
21	Exploring the energy landscape of $\langle X, Y \rangle$ models. Physical Review E, 2013, 87, .	0.8	17
22	Communication: Certifying the potential energy landscape. Journal of Chemical Physics, 2013, 138, 171101.	1.2	16
23	Toward topologically based upper bounds on the number of power flow solutions. , 2016, , .		16
24	Loss surface of XOR artificial neural networks. Physical Review E, 2018, 97, 052307.	0.8	16
25	Communication: Newton homotopies for sampling stationary points of potential energy landscapes. Journal of Chemical Physics, 2014, 141, 121104.	1.2	15
26	Properties of kinetic transition networks for atomic clusters and glassy solids. Physical Chemistry Chemical Physics, 2017, 19, 25498-25508.	1.3	15
27	Counting Equilibria of the Kuramoto Model Using Birationally Invariant Intersection Index. SIAM Journal on Applied Algebra and Geometry, 2018, 2, 489-507.	0.9	14
28	Potential energy landscapes for the 2D XY model: Minima, transition states, and pathways. Journal of Chemical Physics, 2013, 139, 194503.	1.2	13
29	Numerical elimination and moduli space of vacua. Journal of High Energy Physics, 2013, 2013, 1.	1.6	12
30	Exploring the impact of wind penetration on power system equilibrium using a numerical continuation approach. , 2015, , .		11
31	Exploring the potential energy landscape of the Thomson problem via Newton homotopies. Journal of Chemical Physics, 2015, 142, 194113.	1.2	10
32	Enumerating copies in the first Gribov region on the lattice in up to four dimensions. Physical Review D, 2014, 89, .	1.6	9
33	Global structure of curves from generalized unitarity cut of three-loop diagrams. Journal of High Energy Physics, 2015, 2015, 1.	1.6	9
34	Equilibria analysis of power systems using a numerical homotopy method. , 2015, , .		9
35	An inversion-relaxation approach for sampling stationary points of spin model Hamiltonians. Journal of Chemical Physics, 2014, 140, 194104.	1.2	7
36	Energy landscape of the finite-size mean-field 2-spin spherical model and topology trivialization. Physical Review E, 2015, 91, 022133.	0.8	7

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37	Statistics of stationary points of random finite polynomial potentials. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P09012.	0.9	6
38	Certification and the potential energy landscape. Journal of Chemical Physics, 2014, 140, 224114.	1.2	5
39	Reliable mixture critical point computation using polynomial homotopy continuation. AIChE Journal, 2016, 62, 4497-4507.	1.8	3
40	Gauge-fixing on the lattice via orbifolding. Physical Review D, 2014, 90, .	1.6	2
41	Parallel degree computation for binomial systems. Journal of Symbolic Computation, 2017, 79, 535-558.	0.5	2
42	Three Formulations of the Kuramoto Model as a System of Polynomial Equations. , 2019, , .		2
43	On exact minimization of Higgs potentials. European Physical Journal Plus, 2014, 129, 1.	1.2	0
44	Response to "Comment on "Exploring the potential energy landscape of the Thomson problem via Newton homotopies" [J. Chem. Phys. 143, 247101 (2015)]. Journal of Chemical Physics, 2015, 143, 247102. <sup>1,2</sup>	1.2	0
45	Algebraic Geometric Method for Calculating Phase Equilibria from Fundamental Equations of State. Industrial & Engineering Chemistry Research, 2016, 55, 11363-11370.	1.8	0