Maria R D'orsogna

List of Publications by Year
in descending order

38 papers	**992** citations	623734 **14** h-index	434195 **31** g-index
41 all docs	**41** docs citations	**41** times ranked	**941** citing authors

#	Article	IF	Citations
1	Statistical physics of crime: A review. Physics of Life Reviews, 2015, 12, 1-21.	2.8	221
2	State transitions and the continuum limit for a 2D interacting, self-propelled particle system. Physica D: Nonlinear Phenomena, 2007, 232, 33-47.	2.8	214
3	Multi-Vehicle Flocking: Scalability of Cooperative Control Algorithms using Pairwise Potentials. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	89
4	First passage times in homogeneous nucleation and self-assembly. Journal of Chemical Physics, 2012, 137, 244107.	3.0	40
5	Diffusion-Dependent Mechanisms of Receptor Engagement and Viral Entry. Journal of Physical Chemistry B, 2010, 114, 15403-15412.	2.6	31
6	Using excess deaths and testing statistics to determine COVID-19 mortalities. European Journal of Epidemiology, 2021, 36, 545-558.	5.7	29
7	Recidivism and Rehabilitation of Criminal Offenders: A Carrot and Stick Evolutionary Game. PLoS ONE, 2014, 9, e85531.	2.5	29
8	Multistage adsorption of diffusing macromolecules and viruses. Journal of Chemical Physics, 2007, 127, 105101.	3.0	25
9	Phthalates, heavy metals and PAHs in an overpopulated coastal region: Inferences from Abruzzo, central Italy. Marine Pollution Bulletin, 2017, 125, 501-512.	5.0	25
10	Enhancement of cargo processivity by cooperating molecular motors. Physical Chemistry Chemical Physics, 2009, 11, 4851.	2.8	20
11	Criminal Defectors Lead to the Emergence of Cooperation in an Experimental, Adversarial Game. PLoS ONE, 2013, 8, e61458.	2.5	18
12	Swarming in viscous fluids: Three-dimensional patterns in swimmer- and force-induced flows. Physical Review E, 2016, 93, 043112.	2.1	18
13	First Passage and Cooperativity of Queuing Kinetics. Physical Review Letters, 2005, 95, 170603.	7.8	16
14	Exact steady-state velocity of ratchets driven by random sequential adsorption. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 5575-5584.	2.1	15
15	Optimal Cytoplasmic Transport in Viral Infections. PLoS ONE, 2009, 4, e8165.	2.5	15
16	Territorial developments based on graffiti: A statistical mechanics approach. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 252-270.	2.6	15
17	A statistical model of COVID-19 testing in populations: effects of sampling bias and testing errors. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210121.	3.4	15
18	Interplay of chemotaxis and chemokinesis mechanisms in bacterial dynamics. Physical Review E, 2003, 68, 021925.	2.1	14

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19	Temporal clustering of disorder events during the COVID-19 pandemic. PLoS ONE, 2021, 16, e0250433.	2.5	14
20	Combinatoric analysis of heterogeneous stochastic self-assembly. Journal of Chemical Physics, 2013, 139, 121918.	3.0	13
21	Moth Mating: Modeling Female Pheromone Calling and Male Navigational Strategies to Optimize Reproductive Success. Applied Sciences (Switzerland), 2020, 10, 6543.	2.5	13
22	Modelling radicalization: how small violent fringe sects develop into large indoctrinated societies. Royal Society Open Science, 2017, 4, 170678.	2.4	12
23	Age-structured social interactions enhance radicalization. Journal of Mathematical Sociology, 2018, 42, 128-151.	1.2	10
24	Coarsening and accelerated equilibration in mass-conserving heterogeneous nucleation. Physical Review E, 2011, 84, 011608.	2.1	9
25	The Effects of Statistical Multiplicity of Infection on Virus Quantification and Infectivity Assays. Biophysical Journal, 2018, 114, 2974-2985.	0.5	9
26	Local alliances and rivalries shape near-repeat terror activity of al-Qaeda, ISIS, and insurgents. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20898-20903.	7.1	9
27	Physics for better human societies. Physics of Life Reviews, 2015, 12, 40-43.	2.8	8
28	A mathematical model of reward-mediated learning in drug addiction. Chaos, 2022, 32, 021102.	2.5	8
29	A bistable belief dynamics model for radicalization within sectarian conflict. Quarterly of Applied Mathematics, 2017, 75, 19-37.	0.7	7
30	Growth and containment of a hierarchical criminal network. Physical Review E, 2016, 93, 022308.	2.1	7
31	External conversions of player strategy in an evolutionary game: A cost-benefit analysis through optimal control. European Journal of Applied Mathematics, 2013, 24, 131-159.	2.9	6
32	Quantifying the Sensitivity of HIV-1 Viral Entry to Receptor and Coreceptor Expression. Journal of Physical Chemistry B, 2016, 120, 6189-6199.	2.6	5
33	Chiral molecule adsorption on helical polymers. Physical Review E, 2004, 69, 021805.	2.1	4
34	Mathematical modeling of depressive disorders: Circadian driving, bistability and dynamical transitions. Computational and Structural Biotechnology Journal, 2021, 19, 664-690.	4.1	3
35	Impacts of California Proposition 47 on crime in Santa Monica, California. PLoS ONE, 2021, 16, e0251199.	2.5	2
36	Stochastic Model of Randomly End-Linked Polymer Network Microregions. Macromolecules, 2021, 54, 126-142.	4.8	2

#	ARTICLE	IF	CITATIONS
37	Crime, punishment, and evolution in an adversarial game. European Journal of Applied Mathematics, 2016, 27, 317-337.	2.9	1
38	Viral Entry into Cells. , 2010, , .		0