JÃ¡nos TÃ¶rÃ¶k

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4442629/publications.pdf

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48	1,082	361413	395702
papers	citations	20 h-index	33 g-index

50	50	50	868
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Criterion for Phase Separation in One-Dimensional Driven Systems. Physical Review Letters, 2002, 89, 035702.	7.8	152
2	Orientational Order and Alignment of Elongated Particles Induced by Shear. Physical Review Letters, 2012, 108, 228302.	7.8	109
3	Shear Band Formation in Granular Media as a Variational Problem. Physical Review Letters, 2004, 92, 214301.	7.8	67
4	Shear-induced alignment and dynamics of elongated granular particles. Physical Review E, 2012, 86, 051304.	2.1	67
5	The green wave model of two-dimensional traffic: Transitions in the flow properties and in the geometry of the traffic jam. Physica A: Statistical Mechanics and Its Applications, 1996, 231, 515-533.	2.6	64
6	Opinions, Conflicts, and Consensus: Modeling Social Dynamics in a Collaborative Environment. Physical Review Letters, 2013, 110, 088701.	7.8	57
7	Multilayer weighted social network model. Physical Review E, 2014, 90, 052810.	2.1	46
8	Analytic study of clustering in shaken granular material using zero-range processes. Physica A: Statistical Mechanics and Its Applications, 2005, 355, 374-382.	2.6	38
9	Shear zones in granular materials: Optimization in a self-organized random potential. Physical Review E, 2007, 75, 011305.	2.1	32
10	A contact model for the yielding of caked granular materials. Granular Matter, 2011, 13, 777-786.	2.2	32
11	Platoâ€™s cube and the natural geometry of fragmentation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18178-18185.	7.1	30
12	Modeling social dynamics in a collaborative environment. EPJ Data Science, 2014, 3, .	2.8	28
13	Sharp crossover and anomalously large correlation length in driven systems. Journal of Physics A, 2002, 35, L459-L466.	1.6	27
14	Structural transition in social networks: The role of homophily. Scientific Reports, 2019, 9, 4310.	3.3	27
15	Self-Organization, Localization of Shear Bands, and Aging in Loose Granular Materials. Physical Review Letters, 2000, 84, 3851-3854.	7.8	26
16	Critical packing in granular shear bands. Physical Review E, 2007, 75, 011302.	2.1	26
17	Morphologies of three-dimensional shear bands in granular media. Physical Review E, 2006, 74, 031303.	2.1	23
18	Shear flow of dense granular materials near smooth walls. II. Block formation and suppression of slip by rolling friction. Physical Review E, 2012, 86, 011302.	2.1	22

#	Article	IF	Citations
19	Coexistence and Transition between Shear Zones in Slow Granular Flows. Physical Review Letters, 2013, 111, 148301.	7.8	22
20	Sodium effect on static mechanical behavior of MD-modeled sodium silicate glasses. Journal of Non-Crystalline Solids, 2016, 440, 12-25.	3.1	20
21	Modeling the Role of Relationship Fading and Breakup in Social Network Formation. PLoS ONE, 2015, 10, e0133005.	2.5	18
22	Frustrated packing in a granular system under geometrical confinement. Soft Matter, 2018, 14, 396-404.	2.7	15
23	Measuring tensile, shear and torsional strength of solid bridges between particles in the millimeter regime. Granular Matter, 2011, 13, 517-523.	2.2	14
24	What Big Data tells: Sampling the social network by communication channels. Physical Review E, 2016, 94, 052319.	2.1	14
25	Cascading collapse of online social networks. Scientific Reports, 2017, 7, 16743.	3.3	14
26	An adaptive hierarchical domain decomposition method for parallel contact dynamics simulations of granular materials. Journal of Computational Physics, 2012, 231, 612-628.	3.8	12
27	Evolution of shear zones in granular materials. Physical Review E, 2014, 90, 032205.	2.1	12
28	Minimal dissipation theory and shear bands in biaxial tests. Granular Matter, 2011, 13, 565-572.	2.2	9
29	Stylized facts in social networks: Community-based static modeling. Physica A: Statistical Mechanics and Its Applications, 2018, 500, 23-39.	2.6	9
30	Understanding and coping with extremism in an online collaborative environment: A data-driven modeling. PLoS ONE, 2017, 12, e0173561.	2.5	7
31	Slow relaxation due to optimization and restructuring: Solution on a hierarchical lattice. Physical Review E, 2003, 67, 026108.	2.1	6
32	Modeling the Complex Network of Social Interactions. Computational Social Sciences, 2021, , 3-19.	0.4	6
33	Sampling networks by nodal attributes. Physical Review E, 2019, 99, 052304.	2.1	5
34	Deep Learning Exploration of Agent-Based Social Network Model Parameters. Frontiers in Big Data, 2021, 4, 739081.	2.9	4
35	Self-quenched dynamics. European Physical Journal B, 2000, 18, 697-701.	1.5	3
36	Slow dynamics in self-organizing systems. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 567-574.	2.6	3

#	Article	IF	Citations
37	Shearing of loose granular materials: A statistical mesoscopic model. Physical Review E, 2003, 67, 021303.	2.1	3
38	Transition from ductile to brittle failure of sodium silicate glasses: a numerical study. MRS Advances, 2016, 1, 1797-1802.	0.9	3
39	Arching in three-dimensional clogging. EPJ Web of Conferences, 2017, 140, 03076.	0.3	3
40	Evolution of shear zones in granular packings under pressure. Soft Matter, 2021, 17, 1814-1820.	2.7	2
41	Gravity Governs Shear Localization in Confined Dense Granular Flows. Physical Review Letters, 2021, 127, 278003.	7.8	2
42	Heterogeneous Mohr-Coulomb plastic material. Granular Matter, 2000, 2, 71-75.	2.2	1
43	Interacting jammed granular systems. Physical Review E, 2021, 103, 042901.	2.1	1
44	Aging and self-organization of shear bands in granular materials. Physica A: Statistical Mechanics and Its Applications, 1999, 274, 374-380.	2.6	0
45	Multiple shear bands in granular materials. EPJ Web of Conferences, 2017, 140, 03084.	0.3	0
46	Relaxation Times in Simple Shear and the Role of Walls. EPJ Web of Conferences, 2017, 140, 03088.	0.3	0
47	Effective Algorithm for Calculating Spatial Deformations of Pre-stressed Concrete Beams. Lecture Notes in Computer Science, 2010, , 546-553.	1.3	0
48	Multiple Shear Banding in Granular Materials. , 2013, , 331-337.		0