

Anton Souslov

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

1,602
citations

430874

18
h-index

414414

32
g-index

35
all docs

35
docs citations

35
times ranked

1555
citing authors

#	ARTICLE	IF	CITATIONS
1	Topological sound in active-liquid metamaterials. <i>Nature Physics</i> , 2017, 13, 1091-1094.	16.7	189
2	Odd viscosity in chiral active fluids. <i>Nature Communications</i> , 2017, 8, 1573.	12.8	184
3	Phonons and elasticity in critically coordinated lattices. <i>Reports on Progress in Physics</i> , 2015, 78, 073901.	20.1	173
4	Surface phonons, elastic response, and conformal invariance in twisted kagome lattices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 12369-12374.	7.1	154
5	Odd elasticity. <i>Nature Physics</i> , 2020, 16, 475-480.	16.7	142
6	Topological Waves in Fluids with Odd Viscosity. <i>Physical Review Letters</i> , 2019, 122, 128001.	7.8	129
7	Topological active matter. <i>Nature Reviews Physics</i> , 2022, 4, 380-398.	26.6	107
8	Elasticity and Response in Nearly Isostatic Periodic Lattices. <i>Physical Review Letters</i> , 2009, 103, 205503.	7.8	71
9	Sonic Landau Levels and Synthetic Gauge Fields in Mechanical Metamaterials. <i>Physical Review Letters</i> , 2017, 119, 195502.	7.8	61
10	Cluster formation by acoustic forces and active fluctuations in levitated granular matter. <i>Nature Physics</i> , 2019, 15, 460-464.	16.7	55
11	Impact of Single-Particle Compressibility on the Fluid-Solid Phase Transition for Ionic Microgel Suspensions. <i>Physical Review Letters</i> , 2015, 114, 098303.	7.8	49
12	Coupling the Leidenfrost effect and elastic deformations to power sustained bouncing. <i>Nature Physics</i> , 2017, 13, 1095-1099.	16.7	43
13	Anisotropic polymer nanoparticles with controlled dimensions from the morphological transformation of isotropic seeds. <i>Nature Communications</i> , 2019, 10, 5406.	12.8	35
14	Mechanical instability at finite temperature. <i>Nature Communications</i> , 2015, 6, 5968.	12.8	34
15	Localizing softness and stress along loops in 3D topological metamaterials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 489-494.	7.1	28
16	Order by disorder in the antiferromagnetic Ising model on an elastic triangular lattice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11804-11809.	7.1	27
17	Oscillatory chiral flows in confined active fluids with obstacles. <i>Physical Review Research</i> , 2020, 2, .	3.6	26
18	Anisotropic odd viscosity via a time-modulated drive. <i>Physical Review E</i> , 2020, 101, 052606.	2.1	20

#	ARTICLE	IF	CITATIONS
19	Extreme thermodynamics with polymer gel tori: Harnessing thermodynamic instabilities to induce large-scale deformations. <i>Physical Review E</i> , 2018, 98, 020501.	2.1	11
20	Buckled colloidal monolayers connect geometric frustration in soft and hard matter. <i>Soft Matter</i> , 2013, 9, 6565.	2.7	9
21	Flocking from a quantum analogy: spin-orbit coupling in an active fluid. <i>New Journal of Physics</i> , 2018, 20, 013020.	2.9	9
22	Topological Protection Can Arise from Thermal Fluctuations and Interactions. <i>Physical Review Letters</i> , 2019, 122, 118001.	7.8	9
23	Active elastocapillarity in soft solids with negative surface tension. <i>Science Advances</i> , 2022, 8, eabk3079.	10.3	8
24	Soft topological modes protected by symmetry in rigid mechanical metamaterials. <i>Physical Review B</i> , 2021, 103, .	3.2	5
25	Complete absorption of topologically protected waves. <i>Physical Review E</i> , 2021, 104, 014603.	2.1	4
26	Hydrodynamic correlation functions of chiral active fluids. <i>Physical Review Fluids</i> , 2022, 7, .	2.5	4
27	Mechanical Properties of Acoustically Levitated Granular Rafts. <i>Physical Review X</i> , 2022, 12, .	8.9	4
28	Beads on a string: structure of bound aggregates of globular particles and long polymer chains. <i>Soft Matter</i> , 2015, 11, 8092-8099.	2.7	3
29	Optimal power and efficiency of odd engines. <i>Physical Review E</i> , 2021, 104, L062602.	2.1	3
30	Organization of Strongly Interacting Directed Polymer Liquids in the Presence of Stringent Constraints. <i>Physical Review Letters</i> , 2013, 111, 096401.	7.8	2
31	Emergent tilt order in Dirac polymer liquids. <i>Physical Review E</i> , 2015, 92, 030601.	2.1	2
32	Bacterial Filamentation Drives Colony Chirality. <i>MBio</i> , 2021, 12, e0154221.	4.1	1
33	Geometry for mechanics. <i>Nature Physics</i> , 2019, 15, 623-624.	16.7	0
34	Odd living matter defies the golden rule of mechanics. <i>Nature</i> , 2022, 607, 246-247.	27.8	0