

# Efi Efrati

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/161947/publications.pdf>

Version: 2024-02-01

28  
papers

1,783  
citations

623734

14  
h-index

501196

28  
g-index

28  
all docs

28  
docs citations

28  
times ranked

2031  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometry and Mechanics in the Opening of Chiral Seed Pods. <i>Science</i> , 2011, 333, 1726-1730.	12.6	606
2	Shaping of Elastic Sheets by Prescription of Non-Euclidean Metrics. <i>Science</i> , 2007, 315, 1116-1120.	12.6	524
3	The mechanics of non-Euclidean plates. <i>Soft Matter</i> , 2010, 6, 5693.	2.7	148
4	Buckling transition and boundary layer in non-Euclidean plates. <i>Physical Review E</i> , 2009, 80, 016602.	2.1	74
5	The metric description of elasticity in residually stressed soft materials. <i>Soft Matter</i> , 2013, 9, 8187.	2.7	51
6	Hydrodynamic Singularities and Clustering in a Freely Cooling Inelastic Gas. <i>Physical Review Letters</i> , 2005, 94, 088001.	7.8	48
7	Fundamental helical geometry consolidates the plant photosynthetic membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22366-22375.	7.1	42
8	Curved Geometries from Planar Director Fields: Solving the Two-Dimensional Inverse Problem. <i>Physical Review Letters</i> , 2019, 123, 127801.	7.8	33
9	Geometric frustration and compatibility conditions for two-dimensional director fields. <i>Soft Matter</i> , 2018, 14, 424-431.	2.7	30
10	Twist renormalization in molecular crystals driven by geometric frustration. <i>Soft Matter</i> , 2019, 15, 116-126.	2.7	27
11	Why Are Some Crystals Straight?. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15616-15624.	3.1	26
12	Hyperbolic non-Euclidean elastic strips and almost minimal surfaces. <i>Physical Review E</i> , 2011, 83, 046602.	2.1	22
13	Non-Euclidean Ribbons. <i>Journal of Elasticity</i> , 2015, 119, 251-261.	1.9	16
14	Crystals of Benzamide, the First Polymorphous Molecular Compound, Are Helicoidal. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14593-14601.	13.8	15
15	Confined disclinations: Exterior versus material constraints in developable thin elastic sheets. <i>Physical Review E</i> , 2015, 91, 022404.	2.1	14
16	Cumulative geometric frustration in physical assemblies. <i>Physical Review E</i> , 2021, 104, 054601.	2.1	14
17	Self-Driven Fractional Rotational Diffusion of the Harmonic Three-Mass System. <i>Physical Review Letters</i> , 2019, 122, 024102.	7.8	13
18	Three-Dimensional Geometry of the Heinekeâ€™Mikulicz Strictureplasty. <i>Inflammatory Bowel Diseases</i> , 2013, 19, 704-711.	1.9	12

#	ARTICLE	IF	CITATIONS
19	Predicting delayed instabilities in viscoelastic solids. <i>Science Advances</i> , 2020, 6, .	10.3	11
20	Geometric Frustration in Molecular Crystals. <i>Israel Journal of Chemistry</i> , 2020, 60, 1185-1189.	2.3	10
21	Furrows in the wake of propagating d-cones. <i>Nature Communications</i> , 2015, 6, 7232.	12.8	9
22	Crystals of Benzamide, the First Polymorphous Molecular Compound, Are Helicoidal. <i>Angewandte Chemie</i> , 2020, 132, 14701-14709.	2.0	9
23	Moving frames and compatibility conditions for three-dimensional director fields. <i>New Journal of Physics</i> , 2021, 23, 063016.	2.9	9
24	Regular regimes of the harmonic three-mass system. <i>Physical Review E</i> , 2020, 101, 032211.	2.1	7
25	Inflating to shape. <i>Nature Materials</i> , 2019, 18, 2-3.	27.5	5
26	Cumulative geometric frustration and superextensive energy scaling in a nonlinear classical $\langle mml:math \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle mml:mrow \rangle \langle mml:mi \rangle X \langle /mml:mi \rangle \langle mml:mi \rangle Y \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ spin model. <i>Physical Review E</i> , 2022, 105, 024703.	2.1	5
27	Construction of exact minimal parking garages: nonlinear helical motifs in optimally packed lamellar structures. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20200891.	2.1	2
28	Correction: Geometric frustration and compatibility conditions for two-dimensional director fields. <i>Soft Matter</i> , 2018, 14, 1068-1068.	2.7	1