## Koushik Viswanathan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7251542/publications.pdf

Version: 2024-02-01

22 307 10 papers citations h-index

h-index g-index

23
214
times ranked citing authors

17

23 all docs 23 docs citations

#	Article	IF	Citations
1	Sinuous flow in metals. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9828-9832.	7.1	66
2	Stick-slip at soft adhesive interfaces mediated by slow frictional waves. Soft Matter, 2016, 12, 5265-5275.	2.7	35
3	Distinct stick-slip modes in adhesive polymer interfaces. Wear, 2017, 376-377, 1271-1278.	3.1	35
4	On the Cutting of Metals: A Mechanics Viewpoint. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	2.2	20
5	On the extraordinary strength of Prince Rupert's drops. Applied Physics Letters, 2016, 109, 231903.	3.3	17
6	Nucleation and propagation of solitary Schallamach waves. Physical Review E, 2015, 91, 012408.	2.1	14
7	Slow wave propagation in soft adhesive interfaces. Soft Matter, 2016, 12, 9185-9201.	2.7	12
8	A common mechanism for evolution of single shear bands in large-strain deformation of metals. Philosophical Magazine, 2018, 98, 3267-3299.	1.6	12
9	Organic monolayers disrupt plastic flow in metals. Science Advances, 2020, 6, .	10.3	12
10	A Mechanochemical Route to Cutting Highly Strain-Hardening Metals. Tribology Letters, 2019, 67, 1.	2.6	11
11	Geometric treatment of conduction electron scattering by crystal lattice strains and dislocations. Journal of Applied Physics, 2014, 116, .	2.5	10
12	Surface phenomena revealed by <i>in situ</i> irinaging: studies from adhesion, wear and cutting. Surface Topography: Metrology and Properties, 2017, 5, 014002.	1.6	9
13	Viscous Shear Banding in Cutting of Metals. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2018, 140, .	2.2	8
14	Microbial induced calcite precipitation can consolidate martian and lunar regolith simulants. PLoS ONE, 2022, 17, e0266415.	2.5	7
15	Kinematic flow patterns in slow deformation of a dense granular material. Granular Matter, 2015, 17, 553-565.	2.2	6
16	Mechanical Behavior and High Formability of Palm Leaf Materials. Advanced Energy and Sustainability Research, 2021, 2, 2000080.	5.8	6
17	Shear Bands in Materials Processing: Understanding the Mechanics of Flow Localization From Zener's Time to the Present. Applied Mechanics Reviews, 2020, 72, .	10.1	6
18	Surface-Stress Induced Embrittlement of Metals. Nano Letters, 2021, 21, 9502-9508.	9.1	6

#	Article	IF	CITATIONS
19	A Plastic Boundary Layer in Wedge Indentation of Aluminum. Materials Transactions, 2019, 60, 1436-1441.	1.2	5
20	An Analytical Method for Predicting Temperature Rise Due to Multi-body Thermal Interaction in Deformation Processing. Jom, 2022, 74, 513-525.	1.9	5
21	Diffusion of water in palm leaf materials. Journal of the Royal Society Interface, 2021, 18, 20210483.	3.4	2
22	Propagating Schallamach-type waves resemble interface cracks. Physical Review E, 2022, 105, 045002.	2.1	1