

# Vasileios Koutsos

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3450600/publications.pdf>

Version: 2024-02-01

110  
papers

3,456  
citations

94433

37  
h-index

168389

53  
g-index

114  
all docs

114  
docs citations

114  
times ranked

4317  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sponge-like piezoelectric micro- and nanofiber structures for mechanical energy harvesting. <i>Nano Energy</i> , 2022, 98, 107286.	16.0	24
2	Improving through-thickness conductivity of carbon fiber reinforced polymer using carbon nanotube/polyethylenimine at the interlaminar region. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49749.	2.6	15
3	In Vitro Drug Release, Permeability, and Structural Test of Ciprofloxacin-Loaded Nanofibers. <i>Pharmaceutics</i> , 2021, 13, 556.	4.5	55
4	Interlayer bonding between thermoplastic composites and metals by <i>in situ</i> polymerization technique. <i>Journal of Applied Polymer Science</i> , 2021, 138, 51188.	2.6	5
5	Design and development of a nozzle-free electrospinning device for the high-throughput production of biomaterial nanofibers. <i>Medical Engineering and Physics</i> , 2021, 92, 80-87.	1.7	15
6	Recent advancements in the bioprinting of vascular grafts. <i>Biofabrication</i> , 2021, 13, 032003.	7.1	38
7	A modified 3D printer as a hybrid bioprinting-electrospinning system for use in vascular tissue engineering applications. <i>Medical Engineering and Physics</i> , 2021, 94, 52-60.	1.7	22
8	PDMS-ZnO Piezoelectric Nanocomposites for Pressure Sensors. <i>Sensors</i> , 2021, 21, 5873.	3.8	27
9	Dispersive and filter loss performance of calcium carbonate nanoparticles in water for drilling fluid applications. <i>Nanotechnology</i> , 2021, 32, 485704.	2.6	0
10	One Surface Treatment, Multiple Possibilities: Broadening the Use-Potential of Para-Aramid Fibers with Mechanical Adhesion. <i>Polymers</i> , 2021, 13, 3114.	4.5	8
11	Fabrication of a Wearable Flexible Sweat pH Sensor Based on SERS-Active Au/TPU Electrospun Nanofibers. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 51504-51518.	8.0	50
12	Polyolefins and Polyethylene Terephthalate Package Wastes: Recycling and Use in Composites. <i>Energies</i> , 2021, 14, 7306.	3.1	10
13	On the Effect of Substrate Viscoelasticity on the Evaporation Kinetics and Deposition Patterns of Nanosuspension Drops. <i>Langmuir</i> , 2020, 36, 204-213.	3.5	21
14	Influence of organic fouling layer characteristics and osmotic backwashing conditions on cleaning efficiency of RO membranes. <i>Journal of Membrane Science</i> , 2020, 616, 118604.	8.2	24
15	Leading edge erosion of wind turbines: Effect of solid airborne particles and rain on operational wind farms. <i>Wind Energy</i> , 2020, 23, 1955-1965.	4.2	27
16	4D Printing: Materials, Technologies, and Future Applications in the Biomedical Field. <i>Sustainability</i> , 2020, 12, 10628.	3.2	50
17	Measuring the interactions between carbon black nanoparticles and latex thin films in aqueous media using AFM force spectroscopy. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 603, 124920.	4.7	2
18	Thin Polymer Film Force Spectroscopy: Single Chain Pull-out and Desorption. <i>ACS Macro Letters</i> , 2020, 9, 152-157.	4.8	5

#	ARTICLE	IF	CITATIONS
19	High-throughput production of silk fibroin-based electrospun fibers as biomaterial for skin tissue engineering applications. <i>Materials Science and Engineering C</i> , 2020, 112, 110939.	7.3	65
20	Methods of modifying through-thickness electrical conductivity of CFRP for use in structural health monitoring, and its effect on mechanical properties – A review. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 133, 105885.	7.6	39
21	Low-cost FDM 3D-printed modular electro-spray/electrospinning setup for biomedical applications. <i>3D Printing in Medicine</i> , 2020, 6, 8.	3.1	7
22	Preparation and evaluation of amine terminated polyether shale inhibitor for water-based drilling fluid. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	9
23	Investigation of the low-temperature mechanical behavior of elastomers and their carbon nanotube composites using microindentation. <i>Low Temperature Physics</i> , 2019, 45, 568-576.	0.6	8
24	Novel carbon-fibre powder-epoxy composites: Interface phenomena and interlaminar fracture behaviour. <i>Composites Part B: Engineering</i> , 2019, 174, 107012.	12.0	37
25	Probing phospholipid microbubbles by atomic force microscopy to quantify bubble mechanics and nanostructural shell properties. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 181, 506-515.	5.0	10
26	Chemical, microstructural and mechanical properties of ceramic waste blended cementitious systems. <i>Journal of Cleaner Production</i> , 2019, 211, 1228-1238.	9.3	44
27	Novel thermoplastic fibre-metal laminates manufactured by vacuum resin infusion: The effect of surface treatments on interfacial bonding. <i>Materials and Design</i> , 2019, 162, 331-344.	7.0	61
28	Nonisothermal Spreading Dynamics of Self-Rewetting Droplets. <i>Langmuir</i> , 2018, 34, 1916-1931.	3.5	13
29	Ionic liquid mediated surface micropatterning of polymer blends. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46109.	2.6	9
30	Bacteria as living patchy colloids: Phenotypic heterogeneity in surface adhesion. <i>Science Advances</i> , 2018, 4, eaao1170.	10.3	48
31	Wetting Behavior of Polymer Droplets: Effects of Droplet Size and Chain Length. <i>Macromolecules</i> , 2018, 51, 2805-2816.	4.8	8
32	Morphology of Poly(styrene- <i>co</i> -butadiene) Random Copolymer Thin Films and Nanostructures on a Graphite Surface. <i>Langmuir</i> , 2018, 34, 7784-7796.	3.5	5
33	Molecular Interactions behind the Self-Assembly and Microstructure of Mixed Sterol Organogels. <i>Langmuir</i> , 2018, 34, 8629-8638.	3.5	32
34	On the optimization of low-cost FDM 3D printers for accurate replication of patient-specific abdominal aortic aneurysm geometry. <i>3D Printing in Medicine</i> , 2018, 4, 2.	3.1	46
35	Microstructure of $\beta$ -Sitosterol- $\beta$ -Oryzanol Edible Organogels. <i>Langmuir</i> , 2017, 33, 4537-4542.	3.5	61
36	Influence of Local Heating on Marangoni Flows and Evaporation Kinetics of Pure Water Drops. <i>Langmuir</i> , 2017, 33, 5666-5674.	3.5	42

#	ARTICLE	IF	CITATIONS
37	Bubble rise in a non-isothermal self-rewetting fluid and the role of thermocapillarity. International Journal of Thermal Sciences, 2017, 117, 146-162.	4.9	12
38	Microwave induced hierarchical nanostructures on aramid fibers and their influence on adhesion properties in a rubber matrix. Applied Surface Science, 2017, 410, 145-153.	6.1	47
39	Controlled Layer Thinning and p-Type Doping of WSe <sub>2</sub> by Vapor XeF <sub>2</sub> . Advanced Functional Materials, 2017, 27, 1702455.	14.9	103
40	Poly(styrene-co-butadiene) random copolymer thin films and nanostructures on a mica surface: morphology and contact angles of nanodroplets. Soft Matter, 2017, 13, 6152-6166.	2.7	10
41	Elastic properties of suspended multilayer WSe <sub>2</sub> . Applied Physics Letters, 2016, 108, .	3.3	121
42	On the motion of a sessile drop on an incline: Effect of non-monotonic thermocapillary stresses. Applied Physics Letters, 2016, 109, .	3.3	19
43	“Biodrop” Evaporation and Ring-Stain Deposits: The Significance of DNA Length. Langmuir, 2016, 32, 4361-4369.	3.5	20
44	Statistical analysis and stochastic dislocation-based modeling of microplasticity. Journal of the Mechanical Behavior of Materials, 2015, 24, 105-113.	1.8	11
45	Static Response of Coated Microbubbles: Modeling Simulations and Parameter Estimation. Procedia IUTAM, 2015, 16, 123-133.	1.2	2
46	Effect of Poly(ethylene oxide) Molecular Weight on the Pinning and Pillar Formation of Evaporating Sessile Droplets: The Role of the Interface. Langmuir, 2015, 31, 5908-5918.	3.5	14
47	Controlled hydrothermal growth of vertically-aligned zinc oxide nanowires using silicon and polyimide substrates. Microelectronic Engineering, 2015, 145, 86-90.	2.4	12
48	Effect of particle geometry on triple line motion of nano-fluid drops and deposit nano-structuring. Advances in Colloid and Interface Science, 2015, 222, 44-57.	14.7	40
49	High-Density Polymer Microarrays: Identifying Synthetic Polymers that Control Human Embryonic Stem Cell Growth. Advanced Healthcare Materials, 2014, 3, 848-853.	7.6	26
50	Mechanical properties and microstructure of single-wall carbon nanotube/elastomeric epoxy composites with block copolymers. Materials Letters, 2014, 125, 116-119.	2.6	24
51	The effect of evaporation kinetics on nanoparticle structuring within contact line deposits of volatile drops. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 855-866.	4.7	61
52	Minimal oxidation and inflammogenicity of pristine graphene with residence in the lung. Nanotoxicology, 2014, 8, 824-832.	3.0	59
53	An experimental study on dynamic pore wettability. Chemical Engineering Science, 2013, 104, 988-997.	3.8	46
54	Computer simulations of surface deposition of amphiphilic diblock copolymers driven by solvent evaporation. Soft Matter, 2013, 9, 3758.	2.7	7

#	ARTICLE	IF	CITATIONS
55	Stress Relaxation of Polyimide (PI) Cantilevers using Low Energy Ion Bombardment. <i>Soft Materials</i> , 2013, 11, 414-420.	1.7	5
56	Investigation of rubber friction on snow for tyres. <i>Tribology International</i> , 2013, 59, 292-301.	5.9	46
57	Structural transitions in a ring stain created at the contact line of evaporating nanosuspension sessile drops. <i>Physical Review E</i> , 2013, 87, 012301.	2.1	27
58	Thin Films of Poly(isoprene- <i>b</i> -ethylene Oxide) Diblock Copolymers on Mica: An Atomic Force Microscopy Study. <i>Langmuir</i> , 2013, 29, 2339-2349.	3.5	20
59	Tailoring the properties of grafted silver nanoprism composites. <i>Polymer</i> , 2012, 53, 5771-5778.	3.8	8
60	Nanomechanical Properties of Phospholipid Microbubbles. <i>Langmuir</i> , 2012, 28, 5753-5760.	3.5	43
61	Friction on ice: stick and slip. <i>Faraday Discussions</i> , 2012, 156, 243.	3.2	26
62	Self-Assembly of Colloidal Nanoparticles on Surfaces: Towards Surface Nanopatterning. <i>Nanoscience and Technology</i> , 2012, , 191-211.	1.5	0
63	Nanostructured Materials and Their Applications. <i>Nanoscience and Technology</i> , 2012, , .	1.5	51
64	Elastic Modulus of a Polymer Nanodroplet: Theory and Experiment. <i>Langmuir</i> , 2012, 28, 4754-4767.	3.5	20
65	Friction of rubber on ice: A new machine, influence of rubber properties and sliding parameters. <i>Tribology International</i> , 2012, 49, 44-52.	5.9	40
66	Nanoparticle deposits near the contact line of pinned volatile droplets: size and shape revealed by atomic force microscopy. <i>Soft Matter</i> , 2011, 7, 4152.	2.7	46
67	Statistical heterogeneity of plastic deformation: An investigation based on surface profilometry. <i>Acta Materialia</i> , 2010, 58, 4859-4870.	7.9	13
68	Probing microbubble targeting with atomic force microscopy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 80, 12-17.	5.0	14
69	Adsorption of star polymers: computer simulations. <i>Soft Matter</i> , 2010, 6, 1483.	2.7	40
70	Direct measurement of salt-induced mineral repulsion using atomic force microscopy. <i>Chemical Communications</i> , 2010, 46, 5235.	4.1	13
71	Electrical and mechanical properties of carbon nanotube-polyimide composites. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 3139.	1.3	27
72	Polymeric thin shells: Measurement of elastic properties at the nanometer scale using atomic force microscopy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009, 165, 231-234.	3.5	22

#	ARTICLE	IF	CITATIONS
73	Nanomechanics of Biocompatible Hollow Thin-Shell Polymer Microspheres. <i>Langmuir</i> , 2009, 25, 7514-7522.	3.5	53
74	Atomic Force Microscopy and Polymers on Surfaces. , 2009, , 225-244.		2
75	Adsorption and self-assembly of linear polymers on surfaces: a computer simulation study. <i>Soft Matter</i> , 2009, 5, 637-645.	2.7	40
76	Imaging thin and ultrathin organic films by scanning white light interferometry. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008, 152, 125-131.	3.5	11
77	Morphology of ice wear from rubberâ€“ice friction tests and its dependence on temperature and sliding velocity. <i>Wear</i> , 2008, 265, 634-644.	3.1	60
78	Nano-interrogation of a lipid shelled microbubble. , 2008, , .		1
79	Amphiphilic Diblock Copolymers on Mica: Formation of Flat Polymer Nanoislands and Evolution to Protruding Surface Micelles. <i>Macromolecules</i> , 2008, 41, 4313-4320.	4.8	21
80	Size effect in the tensile fracture of single-walled carbon nanotubes with defects. <i>Nanotechnology</i> , 2007, 18, 155708.	2.6	25
81	P5B-9 Investigation of the Response of Attached biSphere&#8482; Microbubbles to Ultrasound. <i>Proceedings IEEE Ultrasonics Symposium</i> , 2007, , .	0.0	0
82	Polymer-like to Soft Colloid-like Behavior of Regular Star Polymers Adsorbed on Surfaces. <i>Macromolecules</i> , 2007, 40, 6947-6958.	4.8	31
83	11A-5 Interrogation of the Targeting Mechanisms of Ultrasound Contrast Agent Microbubbles Using Atomic Force Microscopy. <i>Proceedings IEEE Ultrasonics Symposium</i> , 2007, , .	0.0	0
84	Scale-free statistics of plasticity-induced surface steps on KCl single crystals. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2007, 2007, L04001-L04001.	2.3	11
85	Nanomechanical probing of microbubbles using the atomic force microscope. <i>Ultrasonics</i> , 2007, 46, 349-354.	3.9	42
86	Experimental identification of dynamic tire friction potential on ice surfaces. <i>Vehicle System Dynamics</i> , 2006, 44, 93-103.	3.7	17
87	Deposition of Magnetic Colloidal Particles on Graphite and Mica Surfaces Driven by Solvent Evaporation. <i>Langmuir</i> , 2006, 22, 5611-5616.	3.5	14
88	Carbon nanotubes for integration into nanocomposite materials. <i>Microelectronic Engineering</i> , 2006, 83, 1542-1546.	2.4	14
89	Nanointerrogation of ultrasonic contrast agent microbubbles using atomic force microscopy. <i>Ultrasound in Medicine and Biology</i> , 2006, 32, 579-585.	1.5	38
90	P1F-6 Development of a Novel Experimental Set-Up to Allow Investigation of the Ultrasonic Backscatter from Microbubble Contrast Agents Attached to Surfaces. , 2006, , .		2

#	ARTICLE	IF	CITATIONS
91	RAS as a remote sensor of plastic deformation in metals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 3997-4002.	0.8	5
92	Interactions between Polymers and Carbon Nanotubes: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2005, 109, 10009-10014.	2.6	333
93	Self-Affine Surface Morphology of Plastically Deformed Metals. <i>Physical Review Letters</i> , 2004, 93, 195507.	7.8	99
94	The formation of dewetting structures after evaporation of n-dodecane on graphite studied by atomic force microscopy. <i>Surface Science</i> , 2004, 548, 41-50.	1.9	10
95	Carbon nanotube/epoxy resin composites using a block copolymer as a dispersing agent. <i>Physica Status Solidi A</i> , 2004, 201, R89-R91.	1.7	88
96	Conformation of a Single Polyacrylamide Molecule Adsorbed onto a Mica Surface Studied with Atomic Force Microscopy. <i>Macromolecules</i> , 2004, 37, 3799-3803.	4.8	39
97	Stress-induced optical anisotropy in polycrystalline copper studied by reflection anisotropy spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2003, 36, L115-L118.	2.8	9
98	Pulling Single Chains out of a Collapsed Polymer Monolayer in Bad-Solvent Conditions. <i>Materials Research Society Symposia Proceedings</i> , 2002, 734, 161.	0.1	4
99	The stick-slip transition in highly entangled poly(styrene-butadiene) melts. <i>Advances in Colloid and Interface Science</i> , 2001, 94, 39-52.	14.7	20
100	Adhesion and Deformation of a Single Latex Particle. <i>Langmuir</i> , 2000, 16, 6374-6376.	3.5	25
101	Direct View of Structural Regimes of End-Grafted Polymer Monolayers: A Scanning Force Microscopy Study. <i>Macromolecules</i> , 1999, 32, 1233-1236.	4.8	72
102	Isolated Polymer Chains via Mixed Self-Assembled Monolayers: Morphology and Friction Studied by Scanning Force Microscopy. <i>Macromolecules</i> , 1998, 31, 116-123.	4.8	33
103	Structure of Chemically End-Grafted Polymer Chains Studied by Scanning Force Microscopy in Bad-Solvent Conditions. <i>Macromolecules</i> , 1997, 30, 4719-4726.	4.8	99
104	An Atomic Force Microscopy Study on the Transition from Mushrooms to Octopus Surface Micelles by Changing the Solvent Quality. <i>Langmuir</i> , 1996, 12, 3221-3224.	3.5	46
105	Atomic Force Microscopy and Real Atomic Resolution. <i>Simple Computer Simulations. Europhysics Letters</i> , 1994, 26, 103-107.	2.0	27
106	Imaging of single polymer chains based on their elasticity. <i>Applied Physics Letters</i> , 1994, 65, 1915-1917.	3.3	24
107	Interface magnetism studied by optical second harmonic generation. <i>Journal of Magnetism and Magnetic Materials</i> , 1993, 121, 109-111.	2.3	62
108	Optical second harmonic generation study of interface magnetism. <i>Surface Science</i> , 1993, 287-288, 747-749.	1.9	41

#	ARTICLE	IF	CITATIONS
109	Microbubble nano-interrogation using the atomic force microscope. , 0, , .		0
110	Study on the Morphology Properties of Carbon Nanotube/Polyaniline Composites Thin Film. Advanced Materials Research, 0, 569, 15-18.	0.3	0