Martin Guthold

List of Publications by Year
in descending order

68	5,204	136740 32	114278 63
papers	citations	h-index	g-index

70	70	70	5904
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of Transient Recombinant Expression and Affinity Chromatography Systems for Human Fibrinogen. International Journal of Molecular Sciences, 2022, 23, 1054.	1.8	6
2	The Applicability of Current Turbidimetric Approaches for Analyzing Fibrin Fibers and Other Filamentous Networks. Biomolecules, 2022, 12, 807.	1.8	6
3	Human mammary epithelial cells in a mature, stratified epithelial layer flatten and stiffen compared to single and confluent cells. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129891.	1.1	5
4	Automated Fiber Diameter and Porosity Measurements of Plasma Clots in Scanning Electron Microscopy Images. Biomolecules, 2021, 11, 1536.	1.8	9
5	Strength, deformability and toughness of uncrosslinked fibrin fibers from theoretical reconstruction of stress-strain curves. Acta Biomaterialia, 2021, 136, 327-342.	4.1	15
6	Interpretation and Validation of Maximum Absorbance Data Obtained from Turbidimetry Analysis of Plasma Clots. Thrombosis and Haemostasis, 2020, 120, 044-054.	1.8	20
7	Mechanical Properties of Electrospun, Blended Fibrinogen: PCL Nanofibers. Nanomaterials, 2020, 10, 1843.	1.9	15
8	Influence of Cell Confluency on Mechanical Properties of Breast Cells. Biophysical Journal, 2020, 118, 600a.	0.2	0
9	Intrinsically Unfolded Alpha-C Region Of Fibrinogen is Major Contributor to Mechanical Strength of Fibrin Fibers. Biophysical Journal, 2020, 118, 536a.	0.2	0
10	Development of Zinc Chelating Resin Polymer Beads for the Removal of Cell-Free Hemoglobin. Annals of Biomedical Engineering, 2019, 47, 1470-1478.	1.3	0
11	Erythrocytic bioactivation of nitrite and its potentiation by far-red light. Redox Biology, 2019, 20, 442-450.	3.9	13
12	A simple and robust approach to reducing contact resistance in organic transistors. Nature Communications, 2018, 9, 5130.	5.8	96
13	Enhanced Charge Transport in Hybrid Perovskite Fieldâ€Effect Transistors via Microstructure Control. Advanced Electronic Materials, 2018, 4, 1800316.	2.6	52
14	Analysis of single, cisplatinâ€induced DNA bends by atomic force microscopy and simulations. Journal of Molecular Recognition, 2018, 31, e2731.	1.1	17
15	Solution-Processed Organic and Halide Perovskite Transistors on Hydrophobic Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 18120-18126.	4.0	40
16	Diffusive Behavior of Mismatch Repair Protein MSH2 in Cells at Different Stages of Cancer. Biophysical Journal, 2017, 112, 123a-124a.	0.2	0
17	Stretching single fibrin fibers hampers their lysis. Acta Biomaterialia, 2017, 60, 264-274.	4.1	19
18	Nonuniform Internal Structure of Fibrin Fibers: Protein Density and Bond Density Strongly Decrease with Increasing Diameter. BioMed Research International, 2017, 2017, 1-13.	0.9	18

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19	Diffusion and Binding of Mismatch Repair Protein, MSH2, in Breast Cancer Cells at Different Stages of Neoplastic Transformation. PLoS ONE, 2017, 12, e0170414.	1.1	2
20	Fluorinated benzalkylsilane molecular rectifiers. Scientific Reports, 2016, 6, 38092.	1.6	16
21	Fibrin Fiber Stiffness Is Strongly Affected by Fiber Diameter, but Not by Fibrinogen Glycation. Biophysical Journal, 2016, 110, 1400-1410.	0.2	101
22	Determining the mechanical properties of electrospun poly-Îµ-caprolactone (PCL) nanofibers using AFM and a novel fiber anchoring technique. Materials Science and Engineering C, 2016, 59, 203-212.	3.8	171
23	Highly Stretchable, Biocompatible, Striated Substrate Made from Fugitive Glue. Materials, 2015, 8, 3508-3518.	1.3	3
24	Molecular interference of fibrin's divalent polymerization mechanism enables modulation of multiscale material properties. Biomaterials, 2015, 49, 27-36.	5.7	27
25	AFM of self-assembled lambda DNAâ€"histone networks. Colloids and Surfaces B: Biointerfaces, 2015, 134, 17-25.	2.5	10
26	Combining capillary electrophoresis and next-generation sequencing for aptamer selection. Analytical and Bioanalytical Chemistry, 2015, 407, 1527-1532.	1.9	39
27	CD138-negative myeloma cells regulate mechanical properties of bone marrow stromal cells through SDF-1/CXCR4/AKT signaling pathway. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 338-347.	1.9	17
28	The effect of neighboring cells on the stiffness of cancerous and non-cancerous human mammary epithelial cells. New Journal of Physics, 2014, 16, 105002.	1.2	47
29	Simple method of DNA stretching on glass substrate for fluorescence imaging and spectroscopy. Journal of Biomedical Optics, 2014, 19, 051210.	1.4	11
30	PT-ACRAMTU, A Platinumâ€"Acridine Anticancer Agent, Lengthens and Aggregates, but does not Stiffen or Soften DNA. Cell Biochemistry and Biophysics, 2013, 67, 1103-1113.	0.9	15
31	Characterizing the micro-scale elastic modulus of hydrogels for use in regenerative medicine. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 27, 115-127.	1.5	108
32	How Stiff Is It? Characterizing the microâ€scale elastic modulus of hydrogels for use in regenerative medicine. FASEB Journal, 2013, 27, 1217.21.	0.2	2
33	A Modular Fibrinogen Model that Captures the Stress-Strain Behavior ofÂFibrin Fibers. Biophysical Journal, 2012, 103, 1537-1544.	0.2	43
34	Î±â^'Î± Cross-Links Increase Fibrin Fiber Elasticity and Stiffness. Biophysical Journal, 2012, 102, 168-175.	0.2	85
35	Multiscale Modeling of Double-Helical DNA and RNA: A Unification through Lie Groups. Journal of Physical Chemistry B, 2012, 116, 8556-8572.	1.2	15
36	Electrospinning and optical characterization of organic rubrene nanofibers. Journal of Applied Physics, 2012, 111, .	1.1	14

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37	The mechanical properties of dry, electrospun fibrinogen fibers. Materials Science and Engineering C, 2012, 32, 215-221.	3.8	55
38	Fibrinogen Unfolding Mechanisms Are Not Too Much of a Stretch. Structure, 2011, 19, 1536-1538.	1.6	12
39	Denaturing of single electrospun fibrinogen fibers studied by deep ultraviolet fluorescence microscopy. Microscopy Research and Technique, 2011, 74, 219-224.	1.2	15
40	Selection of beadâ€displayed, PNAâ€encoded chemicals. Journal of Molecular Recognition, 2010, 23, 414-422.	1.1	5
41	The mechanical stressâ€"strain properties of single electrospun collagen type I nanofibers. Acta Biomaterialia, 2010, 6, 2997-3003.	4.1	72
42	The mechanical properties of single fibrin fibers. Journal of Thrombosis and Haemostasis, 2010, 8, 1030-1036.	1.9	142
43	Strength and failure of fibrin fiber branchpoints. Journal of Thrombosis and Haemostasis, 2010, 8, 1135-1138.	1.9	27
44	Single fibrin fiber experiments suggest longitudinal rather than transverse cross-linking: reply to a rebuttal. Journal of Thrombosis and Haemostasis, 2010, 8, 2090-2091.	1.9	5
45	Developing a problem-based learning (PBL) curriculum for professionalism and scientific integrity training for biomedical graduate students. Journal of Medical Ethics, 2010, 36, 614-619.	1.0	32
46	The mechanical properties of individual, electrospun fibrinogen fibers. Biomaterials, 2009, 30, 1205-1213.	5.7	99
47	Increased Heating Efficiency and Selective Thermal Ablation of Malignant Tissue with DNA-Encased Multiwalled Carbon Nanotubes. ACS Nano, 2009, 3, 2667-2673.	7.3	244
48	Interconvertible Lac Repressorâ€"DNA Loops Revealed by Single-Molecule Experiments. PLoS Biology, 2008, 6, e232.	2.6	67
49	Easy and direct method for calibrating atomic force microscopy lateral force measurements. Review of Scientific Instruments, 2007, 78, 063707.	0.6	75
50	A combined atomic force/fluorescence microscopy technique to select aptamers in a single cycle from a small pool of random oligonucleotides. Microscopy Research and Technique, 2007, 70, 372-381.	1.2	67
51	A Comparison of the Mechanical and Structural Properties of Fibrin Fibers with Other Protein Fibers. Cell Biochemistry and Biophysics, 2007, 49, 165-181.	0.9	194
52	Fibrin Fibers Have Extraordinary Extensibility and Elasticity. Science, 2006, 313, 634-634.	6.0	230
53	Visualization and Mechanical Manipulations of Individual Fibrin Fibers Suggest that Fiber Cross Section Has Fractal Dimension 1.3. Biophysical Journal, 2004, 87, 4226-4236.	0.2	83
54	Single DNA Molecule Analysis of Transcription Complexes. Methods in Enzymology, 2003, 371, 34-50.	0.4	8

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55	DNA-functionalized single-walled carbon nanotubes. Nanotechnology, 2002, 13, 601-604.	1.3	221
56	Single-Molecule Study Reveals a ComplexE. coli RNA Polymerase. ChemBioChem, 2001, 2, 167-170.	1.3	9
57	Title is missing!. Biomedical Microdevices, 2001, 3, 9-18.	1.4	13
58	Controlled manipulation of molecular samples with the nanoManipulator. IEEE/ASME Transactions on Mechatronics, 2000, 5, 189-198.	3.7	203
59	Scanning Force Microscopy and Nanomangulation: Studies of Dna and Proteins Involved in Dna Repair. Microscopy and Microanalysis, 1999, 5, 1004-1005.	0.2	0
60	Facilitated Target Location on DNA by IndividualEscherichia coli RNA Polymerase Molecules Observed with the Scanning Force Microscope Operating in Liquid. Journal of Biological Chemistry, 1999, 274, 16665-16668.	1.6	82
61	Investigation and modification of molecular structures with the nanoManipulator. Journal of Molecular Graphics and Modelling, 1999, 17, 187-197.	1.3	55
62	Wrapping of DNA around the E.coli RNA polymerase open promoter complex. EMBO Journal, 1999, 18, 4464-4475.	3.5	195
63	Direct Observation of One-Dimensional Diffusion and Transcription by Escherichia coli RNA Polymerase. Biophysical Journal, 1999, 77, 2284-2294.	0.2	238
64	Transcriptional activation via DNA-looping: visualization of intermediates in the activation pathway of E. coli RNA polymeraseÂ·Ïƒ54 holoenzyme by scanning force microscopy. Journal of Molecular Biology, 1997, 270, 125-138.	2.0	143
65	Escherichia coli RNA Polymerase Activity Observed Using Atomic Force Microscopy. Biochemistry, 1997, 36, 461-468.	1.2	341
66	Scanning Force Microscopy of DNA Deposited onto Mica: EquilibrationversusKinetic Trapping Studied by Statistical Polymer Chain Analysis. Journal of Molecular Biology, 1996, 264, 919-932.	2.0	641
67	Following the assembly of RNA polymerase-DNA complexes in aqueous solutions with the scanning force microscope.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12927-12931.	3.3	136
68	Circular DNA molecules imaged in air by scanning force microscopy. Biochemistry, 1992, 31, 22-26.	1.2	438