

# Wenke Zhang

## List of Publications by Year in descending order

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59  
papers

2,454  
citations

257101

24  
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197535

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59  
all docs

59  
docs citations

59  
times ranked

2994  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantifying thiol-gold interactions towards the efficient strength control. Nature Communications, 2014, 5, 4348.	5.8	518
2	Single molecule mechanochemistry of macromolecules. Progress in Polymer Science, 2003, 28, 1271-1295.	11.8	254
3	Hydrogen Bonding Governs the Elastic Properties of Poly(vinyl alcohol) in Water: A Single-Molecule Force Spectroscopic Studies of PVA by AFM. Macromolecules, 2000, 33, 465-469.	2.2	151
4	Transparent, Healable Elastomers with High Mechanical Strength and Elasticity Derived from Hydrogen-Bonded Polymer Complexes. ACS Applied Materials & Interfaces, 2017, 9, 29120-29129.	4.0	136
5	Extracting a Single Polyethylene Oxide Chain from a Single Crystal by a Combination of Atomic Force Microscopy Imaging and Single-Molecule Force Spectroscopy: Toward the Investigation of Molecular Interactions in Their Condensed States. Journal of the American Chemical Society, 2011, 133, 3226-3229.	6.6	122
6	Single Polymer Chain Elongation of Poly(N-isopropylacrylamide) and Poly(acrylamide) by Atomic Force Microscopy. Journal of Physical Chemistry B, 2000, 104, 10258-10264.	1.2	112
7	Multi-modal mechanophores based on cinnamate dimers. Nature Communications, 2017, 8, 1147.	5.8	106
8	The Bacillus subtilis DnaD and DnaB Proteins Exhibit Different DNA Remodelling Activities. Journal of Molecular Biology, 2005, 351, 66-75.	2.0	60
9	Pulling Genetic RNA out of Tobacco Mosaic Virus Using Single-Molecule Force Spectroscopy. Journal of the American Chemical Society, 2010, 132, 11036-11038.	6.6	59
10	Force Spectroscopy Study on Poly(acrylamide) Derivatives: Effects of Substitutes and Buffers on Single-Chain Elasticity. Nano Letters, 2002, 2, 1169-1172.	4.5	52
11	Mechanochemistry of an Interlocked Poly[2]catenane: From Single Molecule to Bulk Gel. CCS Chemistry, 2020, 2, 513-523.	4.6	52
12	Single molecule force spectroscopy on poly(vinyl alcohol) by atomic force microscopy. Macromolecular Rapid Communications, 1998, 19, 609-612.	2.0	48
13	Directional Loading and Stimulation of PcrA Helicase by the Replication Initiator Protein RepD. Journal of Molecular Biology, 2007, 371, 336-348.	2.0	47
14	A Polymer with Mechanochemically Active Hidden Length. Journal of the American Chemical Society, 2020, 142, 18687-18697.	6.6	46
15	Single-Molecule Atomic Force Spectroscopy Reveals that DnaD Forms Scaffolds and Enhances Duplex Melting. Journal of Molecular Biology, 2008, 377, 706-714.	2.0	39
16	The Bacillus subtilis Primosomal Protein DnaD Untwists Supercoiled DNA. Journal of Bacteriology, 2006, 188, 5487-5493.	1.0	37
17	Desorption Force per Polystyrene Segment in Water. Macromolecules, 2003, 36, 3779-3782.	2.2	34
18	Oxygen Bridge Inhibits Conformational Transition of 1,4-Linked $\beta$ -D-Galactose Detected by Single-Molecule Atomic Force Microscopy. Macromolecules, 2002, 35, 871-876.	2.2	31

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19	Unfolding of a Single Polymer Chain from the Single Crystal by Air-Phase Single-Molecule Force Spectroscopy: Toward Better Force Precision and More Accurate Description of Molecular Behaviors. <i>Macromolecules</i> , 2018, 51, 7052-7060.	2.2	31
20	Direct Observation of Single-Molecule Stick-Slip Motion in Polyamide Single Crystals. <i>ACS Macro Letters</i> , 2018, 7, 762-766.	2.3	28
21	Single-Molecule Force Spectroscopy on Carrageenan by Means of AFM. <i>Macromolecular Rapid Communications</i> , 2001, 22, 1163.	2.0	27
22	Single-Molecule Force Spectroscopy Study on Force-Induced Melting in Polymer Single Crystals: The Chain Conformation Matters. <i>Macromolecules</i> , 2019, 52, 1327-1333.	2.2	27
23	Investigation of the binding modes between AIE-active molecules and dsDNA by single molecule force spectroscopy. <i>Nanoscale</i> , 2015, 7, 8939-8945.	2.8	25
24	Quantifying the Chain Folding in Polymer Single Crystals by Single-Molecule Force Spectroscopy. <i>ACS Macro Letters</i> , 2019, 8, 1194-1199.	2.3	25
25	The Nature of the Force-Induced Conformation Transition of dsDNA Studied by Using Single Molecule Force Spectroscopy. <i>Langmuir</i> , 2010, 26, 9491-9496.	1.6	23
26	EMSA and Single-Molecule Force Spectroscopy Study of Interactions between <i>Bacillus subtilis</i> Single-Stranded DNA-Binding Protein and Single-Stranded DNA. <i>Langmuir</i> , 2011, 27, 15008-15015.	1.6	23
27	Direct observation of the wrapping/unwrapping of ssDNA around/from a SWCNT at the single-molecule level: towards tuning the binding mode and strength. <i>Nanoscale</i> , 2018, 10, 18586-18596.	2.8	22
28	Quantifying the Bonding Strength of Gold-Chalcogen Bonds in Block Copolymer Systems. <i>Chemistry - an Asian Journal</i> , 2019, 14, 1481-1486.	1.7	22
29	Quantifying the Interactions between PEI and Double-Stranded DNA: Toward the Understanding of the Role of PEI in Gene Delivery. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21055-21062.	4.0	21
30	Exploring the Folding Pattern of a Polymer Chain in a Single Crystal by Combining Single-Molecule Force Spectroscopy and Steered Molecular Dynamics Simulations. <i>Langmuir</i> , 2013, 29, 3853-3857.	1.6	20
31	Synthesis and properties of polyester dendrimers bearing carbazole groups in their periphery. <i>Macromolecular Chemistry and Physics</i> , 1998, 199, 1323-1327.	1.1	19
32	Progressing single biomolecule force spectroscopy measurements for the screening of DNA binding agents. <i>Nanotechnology</i> , 2005, 16, 2325-2333.	1.3	19
33	Feeling Inter- or Intramolecular Interactions with the Polymer Chain as Probe: Recent Progress in SMFS Studies on Macromolecular Interactions. <i>ChemPhysChem</i> , 2012, 13, 2238-2256.	1.0	18
34	Single-Molecule Force Spectroscopy Study on the Mechanism of RNA Disassembly in Tobacco Mosaic Virus. <i>Biophysical Journal</i> , 2013, 105, 2790-2800.	0.2	18
35	Identification of the New Type of G-Quadruplex with Multiple Vacant Sites in Human Telomeric DNA. <i>CCS Chemistry</i> , 2022, 4, 3023-3035.	4.6	17
36	Dimerization of the Human Papillomavirus Type 16 E2 N Terminus Results in DNA Looping within the Upstream Regulatory Region. <i>Journal of Virology</i> , 2008, 82, 4853-4861.	1.5	16

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37	Single-molecule observation of mechanical isomerization of spirothiopyran and subsequent Click addition. <i>Nano Research</i> , 2021, 14, 2654-2658.	5.8	14
38	A single-molecule atomic force microscopy study reveals the antiviral mechanism of tannin and its derivatives. <i>Nanoscale</i> , 2019, 11, 16368-16376.	2.8	13
39	Effect of Chain Conformation on the Single-Molecule Melting Force in Polymer Single Crystals: Steered Molecular Dynamics Simulations Study. <i>Langmuir</i> , 2017, 33, 1826-1833.	1.6	12
40	Interactions between PHD3-Bromo of MLL1 and H3K4me3 Revealed by Single-Molecule Magnetic Tweezers in a Parallel DNA Circuit. <i>Bioconjugate Chemistry</i> , 2019, 30, 2998-3006.	1.8	11
41	Atomic Force Microscopy Imaging Study of Aligning DNA by Dumbbell-like Au@Fe <sub>3</sub> O <sub>4</sub> Magnetic Nanoparticles. <i>Langmuir</i> , 2018, 34, 14875-14881.	1.6	10
42	Side-Chain Length Dependence of Young's Modulus and Strength in Crystalline Poly(3-alkylthiophene) Nanofibers. <i>Macromolecules</i> , 2020, 53, 10061-10068.	2.2	10
43	Dynamic topology of double-stranded telomeric DNA studied by single-molecule manipulation in vitro. <i>Nucleic Acids Research</i> , 2020, 48, 6458-6470.	6.5	9
44	A single-molecule study reveals novel rod-like structures formed by a thrombin aptamer repeat sequence. <i>Nanoscale</i> , 2020, 12, 4159-4166.	2.8	9
45	Manipulation of a Single Polymer Chain: From the Nanomechanical Properties to Dynamic Structure Evolution. <i>Macromolecules</i> , 2022, 55, 4177-4199.	2.2	8
46	Self-assembly of anisotropic tobacco mosaic virus nanoparticles on gold substrate. <i>Science China Chemistry</i> , 2011, 54, 137-143.	4.2	7
47	Single Molecule Study on Polymer-Nanoparticle Interactions: The Particle Shape Matters. <i>Langmuir</i> , 2017, 33, 7615-7621.	1.6	6
48	Two-dimensional polymers with versatile functionalities via gemini monomers. <i>Science Advances</i> , 2019, 5, eaaw9120.	4.7	6
49	Achieving Aliphatic Amine Addition to Arylalkynes via the Lewis Acid Assisted Triazole-Gold (TA-Au) Catalyst System. <i>Organic Letters</i> , 2021, 23, 6019-6023.	2.4	6
50	Cinobufotalin inhibits the epithelial-mesenchymal transition of hepatocellular carcinoma cells through down-regulate $\beta$ -catenin in vitro and in vivo. <i>European Journal of Pharmacology</i> , 2022, 922, 174886.	1.7	6
51	Supramolecular research by single molecule force spectroscopy. <i>Macromolecular Symposia</i> , 2003, 195, 109-114.	0.4	4
52	Quantifying the Mechanical Anisotropy in Poly(3-hexylthiophene) Nanofibers. <i>ACS Macro Letters</i> , 2020, 9, 108-114.	2.3	4
53	Nanomechanical Properties of a Supramolecular Helix Stabilized by Non-covalent Interactions. <i>Macromolecular Rapid Communications</i> , 2020, 41, 2000453.	2.0	4
54	Chemical Fuel Mediated Self-regulatory Polymer Brushes for Autonomous Fluorescence Modulator and Wettability Switcher. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100878.	2.0	4

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55	AFM IMAGING AND SINGLE-MOLECULE FORCE SPECTROSCOPY STUDIES ON MACROMOLECULAR INTERACTIONS AT SINGLE-MOLECULE LEVEL. Acta Polymerica Sinica, 2011, 011, 913-922.	0.0	3
56	Force-induced melting of a single polyethylene oxide chain from single crystal: Molecular behavior and influencing factors. Polymer Crystallization, 2019, 2, e10048.	0.5	2
57	Effects of Psoralen on Histone-DNA Interactions Studied by Using Atomic Force Microscopy. Macromolecular Rapid Communications, 2020, 41, e2000017.	2.0	1
58	Polymer Research at the State Key Laboratory of Supramolecular Structure and Materials, Jilin University. Macromolecular Rapid Communications, 2020, 41, e2000630.	2.0	0
59	Ester Bond Containing Protein: Mechanically Stable Yet Dynamic. Chemical Research in Chinese Universities, 0, , 1.	1.3	0