

# Sinan Keten

## List of Publications by Citations

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140  
papers

5,298  
citations

39  
h-index

69  
g-index

155  
ext. papers

6,158  
ext. citations

7.1  
avg, IF

6.26  
L-index

#	Paper	IF	Citations
140	Nanoconfinement controls stiffness, strength and mechanical toughness of beta-sheet crystals in silk. <i>Nature Materials</i> , <b>2010</b> , 9, 359-67	27	916
139	Molecular and nanostructural mechanisms of deformation, strength and toughness of spider silk fibrils. <i>Nano Letters</i> , <b>2010</b> , 10, 2626-34	11.5	301
138	Geometric confinement governs the rupture strength of H-bond assemblies at a critical length scale. <i>Nano Letters</i> , <b>2008</b> , 8, 743-8	11.5	183
137	Nanostructure and molecular mechanics of spider dragline silk protein assemblies. <i>Journal of the Royal Society Interface</i> , <b>2010</b> , 7, 1709-21	4.1	178
136	Hierarchies, multiple energy barriers, and robustness govern the fracture mechanics of alpha-helical and beta-sheet protein domains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 16410-5	11.5	155
135	Theoretical and computational hierarchical nanomechanics of protein materials: Deformation and fracture. <i>Progress in Materials Science</i> , <b>2008</b> , 53, 1101-1241	42.2	144
134	The role of mechanics in biological and bio-inspired systems. <i>Nature Communications</i> , <b>2015</b> , 6, 7418	17.4	125
133	A coarse-grained model for the mechanical behavior of multi-layer graphene. <i>Carbon</i> , <b>2015</b> , 82, 103-115	10.4	118
132	Processable cyclic peptide nanotubes with tunable interiors. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 15296-9	16.4	111
131	Dynamics of water and solute transport in polymeric reverse osmosis membranes via molecular dynamics simulations. <i>Journal of Membrane Science</i> , <b>2016</b> , 506, 95-108	9.6	92
130	A comparative molecular dynamics study of crystalline, paracrystalline and amorphous states of cellulose. <i>Cellulose</i> , <b>2014</b> , 21, 1103-1116	5.5	90
129	Recoverable Slippage Mechanism in Multilayer Graphene Leads to Repeatable Energy Dissipation. <i>ACS Nano</i> , <b>2016</b> , 10, 1820-8	16.7	89
128	Systematic Method for Thermomechanically Consistent Coarse-Graining: A Universal Model for Methacrylate-Based Polymers. <i>Journal of Chemical Theory and Computation</i> , <b>2014</b> , 10, 2514-27	6.4	82
127	Atomistic simulation of nanomechanical properties of Alzheimer's Abeta(1-40) amyloid fibrils under compressive and tensile loading. <i>Journal of Biomechanics</i> , <b>2010</b> , 43, 1196-201	2.9	82
126	Atomistic model of the spider silk nanostructure. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 153701	3.4	77
125	Substrate vs. free surface: Competing effects on the glass transition of polymer thin films. <i>Polymer</i> , <b>2013</b> , 54, 5942-5951	3.9	73
124	Asymptotic strength limit of hydrogen-bond assemblies in proteins at vanishing pulling rates. <i>Physical Review Letters</i> , <b>2008</b> , 100, 198301	7.4	70

123	Thermomechanically Consistent and Temperature Transferable Coarse-Graining of Atactic Polystyrene. <i>Macromolecules</i> , <b>2015</b> , 48, 3057-3068	5.5	61
122	Dimensions of Biological Cellulose Nanocrystals Maximize Fracture Strength. <i>ACS Macro Letters</i> , <b>2014</b> , 3, 64-69	6.6	60
121	Energy-Renormalization for Achieving Temperature Transferable Coarse-Graining of Polymer Dynamics. <i>Macromolecules</i> , <b>2017</b> , 50,	5.5	56
120	Tuning Glass Transition in Polymer Nanocomposites with Functionalized Cellulose Nanocrystals through Nanoconfinement. <i>Nano Letters</i> , <b>2015</b> , 15, 6738-44	11.5	55
119	Impact of Moisture Adsorption on Structure and Physical Properties of Amorphous Biopolymers. <i>Macromolecules</i> , <b>2015</b> , 48, 2793-2800	5.5	54
118	Adhesion mechanisms of curli subunit CsgA to abiotic surfaces. <i>Science Advances</i> , <b>2016</b> , 2, e1600998	14.3	52
117	Poly(ethylene glycol) conjugation stabilizes the secondary structure of $\alpha$ helices by reducing peptide solvent accessible surface area. <i>Biomacromolecules</i> , <b>2013</b> , 14, 4053-60	6.9	52
116	Predicting the Macroscopic Fracture Energy of Epoxy Resins from Atomistic Molecular Simulations. <i>Macromolecules</i> , <b>2016</b> , 49, 9474-9483	5.5	52
115	Multi-scale computational analysis of unidirectional carbon fiber reinforced polymer composites under various loading conditions. <i>Composite Structures</i> , <b>2018</b> , 196, 30-43	5.3	49
114	Critical length scales and strain localization govern the mechanical performance of multi-layer graphene assemblies. <i>Nanoscale</i> , <b>2016</b> , 8, 6456-62	7.7	49
113	Molecular Mechanism of Moisture-Induced Transition in Amorphous Cellulose. <i>ACS Macro Letters</i> , <b>2014</b> , 3, 1037-1040	6.6	47
112	Tunable nanomechanics of protein disulfide bonds in redox microenvironments. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2012</b> , 5, 32-40	4.1	45
111	Traction-separation laws and stick-slip shear phenomenon of interfaces between cellulose nanocrystals. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2015</b> , 78, 526-539	5	45
110	Glass-Transition and Side-Chain Dynamics in Thin Films: Explaining Dissimilar Free Surface Effects for Polystyrene vs Poly(methyl methacrylate). <i>ACS Macro Letters</i> , <b>2016</b> , 5, 481-486	6.6	44
109	Hydrodynamics of capillary imbibition under nanoconfinement. <i>Langmuir</i> , <b>2012</b> , 28, 14488-95	4	43
108	Failure criteria of unidirectional carbon fiber reinforced polymer composites informed by a computational micromechanics model. <i>Composites Science and Technology</i> , <b>2019</b> , 172, 81-95	8.6	42
107	Binary Cellulose Nanocrystal Blends for Bioinspired Damage Tolerant Photonic Films. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800032	15.6	41
106	Simultaneously Tailoring Surface Energies and Thermal Stabilities of Cellulose Nanocrystals Using Ion Exchange: Effects on Polymer Composite Properties for Transportation, Infrastructure, and Renewable Energy Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 27270-27281	9.5	41

105	Molecular Weight Effects on the Glass Transition and Confinement Behavior of Polymer Thin Films. <i>Macromolecular Rapid Communications</i> , <b>2015</b> , 36, 1422-7	4.8	41
104	Tailoring the water structure and transport in nanotubes with tunable interiors. <i>Nanoscale</i> , <b>2015</b> , 7, 121-32	3.7	40
103	Dependence of Polymer Thin Film Adhesion Energy on Cohesive Interactions between Chains. <i>Macromolecules</i> , <b>2014</b> , 47, 5286-5294	5.5	40
102	A coarse-grained model for the mechanical behavior of graphene oxide. <i>Carbon</i> , <b>2017</b> , 117, 476-487	10.4	39
101	Understanding the Interfacial Mechanical Response of Nanoscale Polymer Thin Films via Nanoindentation. <i>Macromolecules</i> , <b>2016</b> , 49, 3810-3817	5.5	39
100	Achieving Enhanced Interfacial Adhesion and Dispersion in Cellulose Nanocomposites via Amorphous Interfaces. <i>Macromolecules</i> , <b>2018</b> , 51, 10304-10311	5.5	39
99	Interfacial mechanics of cellulose nanocrystals. <i>MRS Bulletin</i> , <b>2015</b> , 40, 340-348	3.2	38
98	Rejection mechanisms for contaminants in polyamide reverse osmosis membranes. <i>Journal of Membrane Science</i> , <b>2016</b> , 509, 36-47	9.6	37
97	Experimental and computational analysis of failure mechanisms in unidirectional carbon fiber reinforced polymer laminates under longitudinal compression loading. <i>Composite Structures</i> , <b>2018</b> , 203, 335-348	5.3	37
96	Colloquium: Failure of molecules, bones, and the Earth itself. <i>Reviews of Modern Physics</i> , <b>2010</b> , 82, 1459-1487	14.5	36
95	Energy renormalization for coarse-graining polymers having different segmental structures. <i>Science Advances</i> , <b>2019</b> , 5, eaav4683	14.3	35
94	Elasticity, strength and resilience: A comparative study on mechanical signatures of $\alpha$ -helix, $\beta$ -sheet and tropocollagen domains. <i>Nano Research</i> , <b>2008</b> , 1, 63-71	10	35
93	Alport syndrome mutations in type IV tropocollagen alter molecular structure and nanomechanical properties. <i>Journal of Structural Biology</i> , <b>2009</b> , 168, 503-10	3.4	33
92	Designing multi-layer graphene-based assemblies for enhanced toughness in nacre-inspired nanocomposites. <i>Molecular Systems Design and Engineering</i> , <b>2016</b> , 1, 40-47	4.6	33
91	Strength limit of entropic elasticity in beta-sheet protein domains. <i>Physical Review E</i> , <b>2008</b> , 78, 061913	2.4	32
90	Coupled effects of substrate adhesion and intermolecular forces on polymer thin film glass-transition behavior. <i>Langmuir</i> , <b>2013</b> , 29, 12730-6	4	31
89	Energy Renormalization for Coarse-Graining the Dynamics of a Model Glass-Forming Liquid. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 2040-2045	3.4	30
88	Mesoscopic and multiscale modelling in materials. <i>Nature Materials</i> , <b>2021</b> , 20, 774-786	27	30

87	Stiffness Enhancement in Nacre-Inspired Nanocomposites due to Nanoconfinement. <i>Scientific Reports</i> , <b>2015</b> , 5, 16452	4.9	29
86	Materials by Design for Stiff and Tough Hairy Nanoparticle Assemblies. <i>ACS Nano</i> , <b>2018</b> , 12, 7946-7958	16.7	28
85	Large deformation and fracture mechanics of a beta-helical protein nanotube: Atomistic and continuum modeling. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 3203-3214	5.7	26
84	Side-group size effects on interfaces and glass formation in supported polymer thin films. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 203311	3.9	25
83	Reduced ballistic limit velocity of graphene membranes due to cone wave reflection. <i>Extreme Mechanics Letters</i> , <b>2017</b> , 15, 70-77	3.9	25
82	Interfacial stiffening of polymer thin films under nanoconfinement. <i>Extreme Mechanics Letters</i> , <b>2015</b> , 4, 89-95	3.9	25
81	Energy Renormalization Method for the Coarse-Graining of Polymer Viscoelasticity. <i>Macromolecules</i> , <b>2018</b> , 51,	5.5	25
80	Spalling-like failure by cylindrical projectiles deteriorates the ballistic performance of multi-layer graphene plates. <i>Carbon</i> , <b>2018</b> , 126, 611-619	10.4	24
79	Biomimetic engineering of conductive curli protein films. <i>Nanotechnology</i> , <b>2018</b> , 29, 454002	3.4	24
78	Size-dependent mechanical behavior of free-standing glassy polymer thin films. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 36-45	2.5	22
77	Coarse-grained simulation of molecular mechanisms of recovery in thermally activated shape-memory polymers. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2013</b> , 61, 2625-2637	5	22
76	Structural predictions for curli amyloid fibril subunits CsgA and CsgB. <i>RSC Advances</i> , <b>2017</b> , 7, 48102-48113	3.7	22
75	Effect of moisture on the traction-separation behavior of cellulose nanocrystal interfaces. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 243702	3.4	22
74	Structure and Dynamics of a Graphene Melt. <i>ACS Nano</i> , <b>2018</b> , 12, 5427-5435	16.7	22
73	Plasticity resulted from phase transformation for monolayer molybdenum disulfide film during nanoindentation simulations. <i>Nanotechnology</i> , <b>2017</b> , 28, 164005	3.4	21
72	Persistence length and stochastic fragmentation of supramolecular nanotubes under mechanical force. <i>Nanotechnology</i> , <b>2013</b> , 24, 195103	3.4	21
71	Optimizing the mechanical properties of cellulose nanopaper through surface energy and critical length scale considerations. <i>Cellulose</i> , <b>2017</b> , 24, 3289-3299	5.5	20
70	Effect of Surface Modification on Water Adsorption and Interfacial Mechanics of Cellulose Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 8349-8358	9.5	20

69	Mechanical Reinforcement of Proteins with Polymer Conjugation. <i>ACS Nano</i> , <b>2016</b> , 10, 2259-67	16.7	19
68	Interfacial mechanics and viscoelastic properties of patchy graphene oxide reinforced nanocomposites. <i>Carbon</i> , <b>2020</b> , 158, 303-313	10.4	17
67	Directing the self-assembly of supra-biomolecular nanotubes using entropic forces. <i>Soft Matter</i> , <b>2014</b> , 10, 851-61	3.6	16
66	A multi-timescale strength model of alpha-helical protein domains. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 035111	1.8	16
65	Unraveling the Effect of Material Properties and Geometrical Factors on Ballistic Penetration Energy of Nanoscale Thin Films. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2018</b> , 85,	2.7	15
64	Nanomechanical Characterization of the Triple $\alpha$ -Helix Domain in the Cell Puncture Needle of Bacteriophage T4 Virus. <i>Cellular and Molecular Bioengineering</i> , <b>2009</b> , 2, 66-74	3.9	15
63	Regulating Ion Transport in Peptide Nanotubes by Tailoring the Nanotube Lumen Chemistry. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1514-20	6.4	14
62	Triangular core as a universal strategy for stiff nanostructures in biology and biologically inspired materials. <i>Materials Science and Engineering C</i> , <b>2011</b> , 31, 775-780	8.3	14
61	Organic Nanotube with Subnanometer, pH-Responsive Lumen. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 10953-10957	16.4	13
60	Internal Structure of 15 nm 3-Helix Micelle Revealed by Small-Angle Neutron Scattering and Coarse-Grained MD Simulation. <i>Biomacromolecules</i> , <b>2016</b> , 17, 3262-3267	6.9	13
59	Effect of Polymer Chemistry on Chain Conformations in Hairy Nanoparticle Assemblies. <i>ACS Macro Letters</i> , <b>2019</b> , 8, 1209-1215	6.6	12
58	Effect of Polymer Conjugation Site on Stability and Self-Assembly of Coiled Coils. <i>BioNanoScience</i> , <b>2015</b> , 5, 140-149	3.4	12
57	Impact resistance of nanocellulose films with bioinspired Bouligand microstructures. <i>Nanoscale Advances</i> , <b>2019</b> , 1, 1351-1361	5.1	11
56	Multiple PEG Chains Attached onto the Surface of a Helix Bundle: Conformations and Implications. <i>ACS Biomaterials Science and Engineering</i> , <b>2015</b> , 1, 79-84	5.5	11
55	Curli-Mediated Self-Assembly of a Fibrous Protein Scaffold for Hydroxyapatite Mineralization. <i>ACS Synthetic Biology</i> , <b>2020</b> , 9, 3334-3343	5.7	11
54	Cohesive and adhesive properties of crosslinked semiflexible biopolymer networks. <i>Soft Matter</i> , <b>2019</b> , 15, 3807-3816	3.6	10
53	Creep of Lubricated Layered Nano-Porous Solids and Application To Cementitious Materials. <i>Journal of Nanomechanics &amp; Micromechanics</i> , <b>2015</b> , 5, 04015002		10
52	Design of polymer conjugated 3-helix micelles as nanocarriers with tunable shapes. <i>Nanoscale</i> , <b>2016</b> , 8, 19334-19342	7.7	10

51	Hierarchical cascades of instability govern the mechanics of coiled coils: helix unfolding precedes coil unzipping. <i>Biophysical Journal</i> , <b>2014</b> , 107, 477-484	2.9	10
50	Atomistic simulation based prediction of the solvent effect on the molecular mobility and glass transition of poly (methyl methacrylate). <i>Applied Physics Letters</i> , <b>2013</b> , 102, 041903	3.4	10
49	Hydrogen bonds dominated frictional stick-slip of cellulose nanocrystals. <i>Carbohydrate Polymers</i> , <b>2021</b> , 258, 117682	10.3	10
48	Bending energy penalty enhances the adhesive strength of functional amyloid curli to surfaces. <i>Nanotechnology</i> , <b>2017</b> , 28, 464002	3.4	9
47	Transient effects of drying creep in nanoporous solids: understanding the effects of nanoscale energy barriers. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2016</b> , 472, 20160490	2.4	9
46	Ballistic impact response of lipid membranes. <i>Nanoscale</i> , <b>2018</b> , 10, 4761-4770	7.7	8
45	Sub-20 nm Stable Micelles Based on a Mixture of Coiled-Coils: A Platform for Controlled Ligand Presentation. <i>Biomacromolecules</i> , <b>2017</b> , 18, 3572-3580	6.9	8
44	Linking Genetics and Mechanics in Structural Protein Materials: A Case Study of an Alport Syndrome Mutation in Tropocollagen. <i>Mathematics and Mechanics of Solids</i> , <b>2010</b> , 15, 755-770	2.3	8
43	A Simple Mechanical Model for Synthetic Catch Bonds. <i>Matter</i> , <b>2019</b> , 1, 911-925	12.7	7
42	Temperature effects on the nanoindentation characterization of stiffness gradients in confined polymers. <i>Soft Matter</i> , <b>2019</b> , 15, 359-370	3.6	7
41	Mechanical unfolding of alpha- and beta-helical protein motifs. <i>Soft Matter</i> , <b>2019</b> , 15, 1243-1252	3.6	7
40	Adhesive behavior and detachment mechanisms of bacterial amyloid nanofibers. <i>Npj Computational Materials</i> , <b>2019</b> , 5,	10.9	7
39	Energy Renormalization for Coarse-Graining a Biomimetic Copolymer, Poly(catechol-styrene). <i>Macromolecules</i> , <b>2020</b> , 53, 9397-9405	5.5	7
38	Anisotropy of Shear Relaxation in Confined Thin Films of Unentangled Polymer Melts. <i>Macromolecules</i> , <b>2015</b> , 48, 7631-7639	5.5	6
37	Tunable seat belt behavior in nanocomposite interfaces inspired from bacterial adhesion pili. <i>Soft Matter</i> , <b>2018</b> , 14, 1530-1539	3.6	6
36	El Farol revisited. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2005</b> , 346, 651-656	3.3	6
35	Universal Relation for Effective Interaction between Polymer-Grafted Nanoparticles. <i>Macromolecules</i> , <b>2021</b> , 54, 3052-3064	5.5	6
34	Microbial production of megadalton titin yields fibers with advantageous mechanical properties. <i>Nature Communications</i> , <b>2021</b> , 12, 5182	17.4	6



33	Dimerization energetics of curli fiber subunits CsgA and CsgB. <i>Npj Computational Materials</i> , <b>2019</b> , 5, 10.9	5
32	Disentangling Heat and Moisture Effects on Biopolymer Mechanics. <i>Macromolecules</i> , <b>2020</b> , 53, 1527-1535	5
31	Thermodynamics versus Kinetics Dichotomy in the Linear Self-Assembly of Mixed Nanoblocks. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2021-6	5
30	Multiscale Modeling of Elasticity and Fracture in Organic Nanotubes. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2014</b> , 140, 431-442	5
29	ATOMISTIC MODELING AND MECHANICS OF SELF-ASSEMBLED ORGANIC NANOTUBES. <i>International Journal of Applied Mechanics</i> , <b>2011</b> , 03, 667-684	5
28	Polymer Conjugation as a Strategy for Long-Range Order in Supramolecular Polymers. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 3425-33	5
27	Dynamics of interacting interphases in polymer bilayer thin films. <i>MRS Communications</i> , <b>2017</b> , 7, 832-839	4
26	Star topology increases ballistic resistance in thin polymer films. <i>Extreme Mechanics Letters</i> , <b>2020</b> , 41, 101038	4
25	Structure and Mechanics of Bundled Semiflexible Polymer Networks. <i>Macromolecules</i> , <b>2020</b> , 53, 6123-6134	4
24	A nanoscale perspective on the effects of transverse microprestress on drying creep of nanoporous solids. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2018</b> , 474, 20170570	3
23	Molecular insights into charged nanofiltration membranes: Structure, water transport, and water diffusion. <i>Journal of Membrane Science</i> , <b>2021</b> , 120057	3
22	Hygromechanical mechanisms of wood cell wall revealed by molecular modeling and mixture rule analysis. <i>Science Advances</i> , <b>2021</b> , 7, eabi8919	3
21	Stable micelles based on a mixture of coiled-coils: the role of different oligomeric states. <i>Nanoscale</i> , <b>2018</b> , 10, 7589-7596	2
20	Conformational changes during permeation of Na through a modified cyclic peptide nanotube promote energy landscape roughness. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 31698-31710	2
19	Microstructure and Size Effects on the Mechanics of Two Dimensional, High Aspect Ratio Nanoparticle Assemblies. <i>Frontiers in Materials</i> , <b>2019</b> , 6,	2
18	Systematic Coarse-graining of Epoxy Resins with Machine Learning-Informed Energy Renormalization. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	2
17	Quantifying Chemical Composition and Cross-link Effects on EPDM Elastomer Viscoelasticity with Molecular Dynamics. <i>Macromolecules</i> , <b>2021</b> , 54, 6780-6789	2
16	Conformational stability of the bacterial adhesin, FimH, with an inactivating mutation. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2021</b> , 89, 276-288	2



15	Self-strengthening biphasic nanoparticle assemblies with intrinsic catch bonds. <i>Nature Communications</i> , <b>2021</b> , 12, 85	17.4	2
14	Numerical Study of the Creep of Slit Nanopores: Role of Water <b>2015</b> ,		1
13	Analysis of Cone Wave Reflection in Finite-Size Elastic Membranes and Extension of the Ballistic Impact Problem From Elastic to Viscoelastic Membranes. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2018</b> , 85,	2.7	1
12	Critical Scales Govern the Mechanical Fragmentation Mechanisms of Biomolecular Assemblies. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2013</b> , 80,	2.7	1
11	Hygromechanics of softwood cellulosic nanocomposite with intermolecular interactions at fiber-matrix interface investigated with molecular dynamics. <i>Composites Part B: Engineering</i> , <b>2022</b> , 228, 109449	10	1
10	Tuning star architecture to control mechanical properties and impact resistance of polymer thin films. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100596	6.1	1
9	Geometric confinement governs the rupture strength of H-bond assemblies at a critical length scale. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1061, 1		0
8	Atomistic Modeling of Peptide Aggregation and Sheet Structuring in Corn Zein for Viscoelasticity. <i>Biomacromolecules</i> , <b>2021</b> , 22, 1856-1866	6.9	0
7	Understanding emergent functions in self-assembled fibrous networks. <i>Nanotechnology</i> , <b>2015</b> , 26, 3525014		0
6	Alport Syndrome mutation changes molecular structure and nanomechanics of type IV tropocollagen. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1187, 26		0
5	Asymptotic Strength Limit of Hydrogen Bond Assemblies in Proteins at Vanishing Pulling Rates. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1062, 1		0
4	Scaling for the inverse thickness dependence of specific penetration energy in polymer thin film impact tests. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2022</b> , 161, 104808	5	0
3	Explorations into the Mechanics of Hairy Nanoparticle Assemblies with Molecular Dynamics. <i>Springer Series in Materials Science</i> , <b>2021</b> , 179-202	0.9	0
2	Multiscale Modeling of Biological Protein Materials Deformation and Failure. <i>Challenges and Advances in Computational Chemistry and Physics</i> , <b>2010</b> , 473-533	0.7	0
1	Atomistic investigation of fracture mechanisms in phosphorus-functionalized epoxy resins. <i>International Journal of Mechanical Sciences</i> , <b>2022</b> , 107412	5.5	0