Jingjie Yeo

List of Publications by Year
in descending order

62 papers	2,069 citations	218381 26 h-index	243296 44 g-index
65 all docs	65 docs citations	65 times ranked	2984 citing authors

#	Article	IF	Citations
1	Paraffin-enabled graphene transfer. Nature Communications, 2019, 10, 867.	5.8	185
2	A molecular dynamics study of the thermal conductivity of graphene nanoribbons containing dispersed Stoneâ€“Throwerâ€“Wales defects. Carbon, 2012, 50, 4887-4893.	5.4	150
3	Highâ€Strength, Durable Allâ€Silk Fibroin Hydrogels with Versatile Processability toward Multifunctional Applications. Advanced Functional Materials, 2018, 28, 1704757.	7.8	133
4	Dynamic pigmentary and structural coloration within cephalopod chromatophore organs. Nature Communications, 2019, 10, 1004.	5.8	105
5	Advancing the frontiers of silk fibroin protein-based materials for futuristic electronics and clinical wound-healing (Invited review). Materials Science and Engineering C, 2018, 86, 151-172.	3.8	99
6	Solar-powered nanostructured biopolymer hygroscopic aerogels for atmospheric water harvesting. Nano Energy, 2021, 80, 105569.	8.2	99
7	Wood-Derived Carbon with Selectively Introduced Câ•O Groups toward Stable and High Capacity Anodes for Sodium Storage. ACS Applied Materials & Interfaces, 2020, 12, 27499-27507.	4.0	75
8	Fiberâ€Based Biopolymer Processing as a Route toward Sustainability. Advanced Materials, 2022, 34, e2105196.	11.1	71
9	Molecular dynamics simulation of the thermal conductivity of shorts strips of graphene and silicene: a comparative study. International Journal of Mechanics and Materials in Design, 2013, 9, 105-114.	1.7	70
10	Peptideâ€“Graphene Interactions Enhance the Mechanical Properties of Silk Fibroin. ACS Applied Materials & Interfaces, 2015, 7, 21787-21796.	4.0	64
11	A review on low dimensional carbon desalination and gas separation membrane designs. Journal of Membrane Science, 2020, 598, 117785.	4.1	64
12	Comparing the effects of dispersed Stoneâ€“Throwerâ€“Wales defects and double vacancies on the thermal conductivity of graphene nanoribbons. Nanotechnology, 2012, 23, 385702.	1.3	56
13	Conductive Silkâ€Based Composites Using Biobased Carbon Materials. Advanced Materials, 2019, 31, e1904720.	11.1	52
14	Synergistic Rollâ€toâ€Roll Transfer and Doping of CVDâ€Graphene Using Parylene for Ambientâ€Stable and Ultraâ€Lightweight Photovoltaics. Advanced Functional Materials, 2020, 30, 2001924.	7.8	45
15	Free-standing graphene slit membrane for enhanced desalination. Carbon, 2016, 110, 350-355.	5.4	44
16	Discovery and design of soft polymeric bio-inspired materials with multiscale simulations and artificial intelligence. Journal of Materials Chemistry B, 2020, 8, 6562-6587.	2.9	44
17	A molecular dynamics study of the thermal conductivity of nanoporous silica aerogel, obtained through negative pressure rupturing. Journal of Non-Crystalline Solids, 2012, 358, 1350-1355.	1.5	41
18	Multiscale Modeling of Silk and Silkâ€Based Biomaterialsâ€"A Review. Macromolecular Bioscience, 2019, 19, e1800253.	2.1	40

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19	Multiscale modeling of keratin, collagen, elastin and related human diseases: Perspectives from atomistic to coarse-grained molecular dynamics simulations. Extreme Mechanics Letters, 2018, 20, 112-124.	2.0	39
20	Determination of the Young's modulus of silica aerogels â€“ an analyticalâ€“numerical approach. Soft Matter, 2013, 9, 11367.	1.2	38
21	Unusually low and density-insensitive thermal conductivity of three-dimensional gyroid graphene. Nanoscale, 2017, 9, 13477-13484.	2.8	38
22	Materials-by-design: computation, synthesis, and characterization from atoms to structures. Physica Scripta, 2018, 93, 053003.	1.2	32
23	Investigations on different two-dimensional materials as slit membranes for enhanced desalination. Journal of Membrane Science, 2020, 598, 117653.	4.1	32
24	Multiscale Design of Graphyneâ€Based Materials for Highâ€Performance Separation Membranes. Advanced Materials, 2019, 31, e1805665.	11.1	30
25	Enhanced thermal characterization of silica aerogels through molecular dynamics simulation. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 075004.	0.8	27
26	Fabrication and Characterization of Recombinant Silkâ€Elastinâ€Likeâ€Protein (SELP) Fiber. Macromolecular Bioscience, 2018, 18, e1800265.	2.1	26
27	Current Insights on the Diverse Structures and Functions in Bacterial Collagen-like Proteins. ACS Biomaterials Science and Engineering, 2023, 9, 3778-3795.	2.6	25
28	Carbon nanoscrollâ€“silk crystallite hybrid structures with controllable hydration and mechanical properties. Nanoscale, 2017, 9, 9181-9189.	2.8	21
29	Unraveling the molecular mechanisms of thermo-responsive properties of silk-elastin-like proteins by integrating multiscale modeling and experiment. Journal of Materials Chemistry B, 2018, 6, 3727-3734.	2.9	21
30	Dataâ€Driven Approaches Toward Smarter Additive Manufacturing. Advanced Intelligent Systems, 2021, 3, 2100014.	3.3	21
31	Carbon nanotube arrays as multilayer transverse flow carbon nanotube membrane for efficient desalination. Journal of Membrane Science, 2019, 581, 383-392.	4.1	20
32	Adverse effects of Alport syndrome-related Gly missense mutations on collagen type IV: Insights from molecular simulations and experiments. Biomaterials, 2020, 240, 119857.	5.7	18
33	Metamodeling of constitutive model using Gaussian process machine learning. Journal of the Mechanics and Physics of Solids, 2021, 154, 104532.	2.3	17
34	Nanoscale Fluid Mechanics Working Principles of Transverse Flow Carbon Nanotube Membrane for Enhanced Desalination. International Journal of Applied Mechanics, 2017, 09, 1750034.	1.3	16
35	Effects of CNT size on the desalination performance of an outer-wall CNT slit membrane. Physical Chemistry Chemical Physics, 2018, 20, 13896-13902.	1.3	16
36	Birefringent Silk Fibroin Hydrogel Constructed via Binary Solvent-Exchange-Induced Self-Assembly. Biomacromolecules, 2021, 22, 1955-1965.	2.6	16

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37	Tuning the structure of monomeric amyloid beta peptide by the curvature of carbon nanotubes. Carbon, 2019, 153, 717-724.	5.4	14
38	Performance-enhanced lithium metal batteries through ionic liquid based electrolytes and mechanism research derived by density functional theory calculations. Electrochimica Acta, 2021, 368, 137535.	2.6	14
39	Toward rational algorithmic design of collagen-based biomaterials through multiscale computational modeling. Current Opinion in Chemical Engineering, 2019, 24, 79-87.	3.8	13
40	Multiscale Modeling of Silk and Silkâ€Based Biomaterialsâ€"A Review. Macromolecular Bioscience, 2019, 19, 1970007.	2.1	12
41	Adsorption and Conformational Evolution of Alpha-Helical BSA Segments on Graphene: A Molecular Dynamics Study. International Journal of Applied Mechanics, 2016, 08, 1650021.	1.3	11
42	Molecular Dynamics Analysis of the Thermal Conductivity of Graphene and Silicene Monolayers of Different Lengths. Journal of Computational and Theoretical Nanoscience, 2014, 11, 1790-1796.	0.4	10
43	Numerical characterization of ultraviolet ink fluid agglomeration and the surfactant effect in nanoinkjet printing. Polymers for Advanced Technologies, 2017, 28, 1057-1064.	1.6	10
44	Effects of oscillating pressure on desalination performance of transverse flow CNT membrane. Desalination, 2019, 451, 35-44.	4.0	10
45	Many-body dissipative particle dynamics simulations of nanodroplet formation in 3D nano-inkjet printing. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 055005.	0.8	9
46	The effect of ionic liquid-based electrolytes for dendrite-inhibited and performance-boosted lithium metal batteries. Electrochimica Acta, 2022, 401, 139527.	2.6	9
47	Strengthening the Sustainability of Additive Manufacturing through Dataâ€Driven Approaches and Workforce Development. Advanced Intelligent Systems, 2021, 3, 2100069.	3.3	8
48	Silica Aerogels: A Review of Molecular Dynamics Modelling and Characterization of the Structural, Thermal, and Mechanical Properties. , 2020, , 1575-1595.		7
49	Superlubricity-activated thinning of graphite flakes compressed by passivated crystalline silicon substrates for graphene exfoliation. Carbon, 2014, 80, 68-74.	5.4	6
50	Customizing the properties of borosilicate foam glasses via additions under low sintering temperatures with insights from molecular dynamics simulations. Journal of Non-Crystalline Solids, 2022, 576, 121273.	1.5	6
51	The Impact of Foaming Effect on the Physical and Mechanical Properties of Foam Glasses with Molecular-Level Insights. Molecules, 2022, 27, 876.	1.7	6
52	Engineering Natural and Recombinant Silks for Sustainable Biodevices. Frontiers in Chemistry, 2022, 10, .	1.8	6
53	Conformational Freedomâ€Enhanced Optomechanical Energy Conversion Efficiency in Bulk Azoâ€Polyimides. Advanced Functional Materials, 0, , 2104414.	7.8	4
54	Producing light, strong foam glass under a low sintering temperature with insights from molecular simulations. Journal of Non-Crystalline Solids, 2022, 582, 121447.	1.5	4

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55	Numerical study of surface agglomeration of ultravioletâ€polymeric ink and its control during 3D nanoâ€inkjet printing process. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1615-1624.	2.4	3
56	Specific osteogenesis imperfecta-related Gly substitutions in type I collagen induce distinct structural, mechanical, and dynamic characteristics. Chemical Communications, 2021, 57, 12183-12186.	2.2	3
57	Hybridly double-crosslinked carbon nanotube networks with combined strength and toughness <i>via</i> cooperative energy dissipation. Nanoscale, 2022, 14, 2434-2445.	2.8	3
58	Design and Production of Customizable and Highly Aligned Fibrillar Collagen Scaffolds. ACS Biomaterials Science and Engineering, 2021, , .	2.6	2
59	Conformational Freedomâ€Enhanced Optomechanical Energy Conversion Efficiency in Bulk Azoâ€Polyimides (Adv. Funct. Mater. 45/2021). Advanced Functional Materials, 2021, 31, .	7.8	2
60	Silica Aerogels: A Review of Molecular Dynamics Modelling and Characterization of the Structural, Thermal, and Mechanical Properties. , 2018, , 1-21.		1
61	Molecular dynamics modelling of EGCG clusters on ceramide bilayers. AIP Conference Proceedings, 2015, , .	0.3	0
62	Effects of Nanoporosity on the Mechanical Properties and Applications of Aerogels in Composite Structures. , 2016, , 97-126.		0