

# Kin Liao

## List of Publications by Citations

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101  
papers

5,804  
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39  
h-index

75  
g-index

103  
ext. papers

6,483  
ext. citations

6.9  
avg, IF

5.98  
L-index

#	Paper	IF	Citations
101	Interfacial characteristics of a carbon nanotube/polystyrene composite system. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 4225-4227	3.4	454
100	Effects of environmental aging on the mechanical properties of bamboo/glass fiber reinforced polymer matrix hybrid composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2002</b> , 33, 43-52	8.4	426
99	Durability of bamboo-glass fiber reinforced polymer matrix hybrid composites. <i>Composites Science and Technology</i> , <b>2003</b> , 63, 375-387	8.6	385
98	Bio-inspired nacre-like composite films based on graphene with superior mechanical, electrical, and biocompatible properties. <i>Advanced Materials</i> , <b>2012</b> , 24, 3426-31	24	336
97	Carbon Aerogel from Winter Melon for Highly Efficient and Recyclable Oils and Organic Solvents Absorption. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 1492-1497	8.3	237
96	Mechanical properties and interfacial characteristics of carbon-nanotube-reinforced epoxy thin films. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 2833-2835	3.4	235
95	Growth of Metal/Metal Oxide Nanostructures on Freestanding Graphene Paper for Flexible Biosensors. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 2487-2494	15.6	224
94	Synergistic effect of hybrid carbon nanotube/graphene oxide as a nanofiller in enhancing the mechanical properties of PVA composites. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 10844		173
93	Graphene foam developed with a novel two-step technique for low and high strains and pressure-sensing applications. <i>Small</i> , <b>2015</b> , 11, 2380-5	11	167
92	From biomass to high performance solar thermal and electric thermal energy conversion and storage materials. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 7759-7765	13	166
91	Novel graphene foam composite with adjustable sensitivity for sensor applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 9195-202	9.5	154
90	Highly Flexible Strain Sensor from Tissue Paper for Wearable Electronics. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 4288-4295	8.3	145
89	Effects of environmental aging on the properties of pultruded GFRP. <i>Composites Part B: Engineering</i> , <b>1999</b> , 30, 485-493	10	137
88	Multifunctional Wearable Device Based on Flexible and Conductive Carbon Sponge/Polydimethylsiloxane Composite. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 33189-33196	9.5	132
87	From cotton to wearable pressure sensor. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 2181-2187	13	127
86	Lightweight and Highly Conductive Aerogel-like Carbon from Sugarcane with Superior Mechanical and EMI Shielding Properties. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 1419-1427	8.3	118
85	Environmental effects on bamboo-glass/polypropylene hybrid composites. <i>Journal of Materials Science</i> , <b>2003</b> , 38, 363-376	4.3	92

84	Mechanical behavior of human mesenchymal stem cells during adipogenic and osteogenic differentiation. <i>Biochemical and Biophysical Research Communications</i> , <b>2010</b> , 393, 150-5	3.4	87
83	Flexible wire-shaped strain sensor from cotton thread for human health and motion detection. <i>Scientific Reports</i> , <b>2017</b> , 7, 45013	4.9	83
82	The effect of the ultrasonication pre-treatment of graphene oxide (GO) on the mechanical properties of GO/polyvinyl alcohol composites. <i>Carbon</i> , <b>2013</b> , 55, 321-327	10.4	81
81	Engineering closed-cell structure in lightweight and flexible carbon foam composite for high-efficient electromagnetic interference shielding. <i>Carbon</i> , <b>2018</b> , 136, 299-308	10.4	77
80	Tension-tension fatigue behavior of unidirectional single-walled carbon nanotube reinforced epoxy composite. <i>Carbon</i> , <b>2003</b> , 41, 2177-2179	10.4	76
79	Viscoelastic behaviour of human mesenchymal stem cells. <i>BMC Cell Biology</i> , <b>2008</b> , 9, 40		70
78	Nature-Inspired, Graphene-Wrapped 3D MoS Ultrathin Microflower Architecture as a High-Performance Anode Material for Sodium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 22323-22331	9.5	64
77	Failure mechanisms of carbon nanotube fibers under different strain rates. <i>Carbon</i> , <b>2012</b> , 50, 2887-2893	10.4	63
76	Enhanced Sensitivity of Patterned Graphene Strain Sensors Used for Monitoring Subtle Human Body Motions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 11176-11183	9.5	58
75	Shape-Tunable Biphasic Janus Particles as pH-Responsive Switchable Surfactants. <i>Macromolecules</i> , <b>2017</b> , 50, 9276-9285	5.5	57
74	Improved mechanical properties of coiled carbon nanotubes reinforced epoxy nanocomposites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2006</b> , 37, 1837-1840	8.4	56
73	Measuring mechanical properties of thin flexible films by a shaft-loaded blister test. <i>Thin Solid Films</i> , <b>1999</b> , 352, 167-172	2.2	54
72	From sewing thread to sensor: Nylon fiber strain and pressure sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 240, 1083-1090	8.5	49
71	Adhesion contact dynamics of HepG2 cells on galactose-immobilized substrates. <i>Biomaterials</i> , <b>2003</b> , 24, 837-50	15.6	46
70	Environmental fatigue of unidirectional glass-carbon fiber reinforced hybrid composite. <i>Composites Part B: Engineering</i> , <b>2001</b> , 32, 355-363	10	46
69	Synergistic toughening of epoxy with carbon nanotubes and graphene oxide for improved long-term performance. <i>RSC Advances</i> , <b>2013</b> , 3, 8849	3.7	42
68	A tensile strength model for unidirectional fiber-reinforced brittle matrix composite. <i>International Journal of Fracture</i> , <b>2000</b> , 106, 95-115	2.3	42
67	Graphene coated piezo-resistive fabrics for liquid composite molding process monitoring. <i>Composites Science and Technology</i> , <b>2017</b> , 148, 106-114	8.6	41

66	Highly electrically conductive nanocomposites based on polymer-infused graphene sponges. <i>Scientific Reports</i> , <b>2014</b> , 4, 4652	4.9	41
65	Nonlinear elastic properties of carbon nanotubes subjected to large axial deformations. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	41
64	Non-destroyable graphene cladding on a range of textile and other fibers and fiber mats. <i>RSC Advances</i> , <b>2014</b> , 4, 16935-16938	3.7	40
63	Prospects challenges and stability of 2D MXenes for clean energy conversion and storage applications. <i>Npj 2D Materials and Applications</i> , <b>2021</b> , 5,	8.8	40
62	Long-term environmental fatigue of pultruded glass-fiber-reinforced composites under flexural loading. <i>International Journal of Fatigue</i> , <b>1999</b> , 21, 485-495	5	39
61	Origin of the High Donor/Acceptor Composition Tolerance in Device Performance and Mechanical Robustness of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 582-594	9.6	38
60	The effects of catalyst treatment on fast growth of millimeter-long multi-walled carbon nanotube arrays. <i>Applied Surface Science</i> , <b>2011</b> , 257, 7704-7708	6.7	36
59	Characterization of nonlinear elasticity and elastic instability in single-walled carbon nanotubes. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 8145-8148	2.5	33
58	Development of Shape-Tuned, Monodisperse Block Copolymer Particles through Solvent-Mediated Particle Restructuring. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 1066-1074	9.6	31
57	2D Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene nanosheets coated cellulose fibers based 3D nanostructures for efficient water desalination. <i>Chemical Engineering Journal</i> , <b>2021</b> , 406, 126827	14.7	28
56	Inorganic/polymer-graphene hybrid gel as versatile electrochemical platform for electrochemical capacitor and biosensor. <i>Carbon</i> , <b>2018</b> , 132, 589-597	10.4	26
55	Characterization of bamboo-glass fiber reinforced polymer matrix hybrid composite. <i>Journal of Materials Science Letters</i> , <b>2000</b> , 19, 1873-1876		26
54	Cellular Graphene: Fabrication, Mechanical Properties, and Strain-Sensing Applications. <i>Matter</i> , <b>2019</b> , 1, 1148-1202	12.7	24
53	Recognition of carbon nanotube chirality by phage display. <i>RSC Advances</i> , <b>2012</b> , 2, 1466-1476	3.7	24
52	Fabrication and characterization of recyclable carbon nanotube/polyvinyl butyral composite fiber. <i>Composites Science and Technology</i> , <b>2011</b> , 71, 1665-1670	8.6	24
51	Influence of moisture-induced stress on in situ fiber strength degradation of unidirectional polymer composite. <i>Composites Part B: Engineering</i> , <b>2001</b> , 32, 365-370	10	24
50	Terpolymer approach for controlling the crystalline behavior of naphthalene diimide-based polymer acceptors and enhancing the performance of all-polymer solar cells. <i>Polymer Journal</i> , <b>2016</b> , 48, 517-524	2.7	23
49	A nonlinear pullout model for unidirectional carbon nanotube-reinforced composites. <i>Composites Part B: Engineering</i> , <b>2004</b> , 35, 211-217	10	23

48	Modulating cell adhesion dynamics on carbon nanotube monolayer engineered with extracellular matrix proteins. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 1038-47	9.5	21
47	Adhesion contact dynamics of primary hepatocytes on poly(ethylene terephthalate) surface. <i>Biomaterials</i> , <b>2005</b> , 26, 891-8	15.6	21
46	A highly torsionable fiber-shaped supercapacitor. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4397-4403	13	20
45	Rupture of plasma membrane under tension. <i>Journal of Biomechanics</i> , <b>2011</b> , 44, 1361-6	2.9	18
44	Enhancement of Vicker's hardness of nanoclay-supported nanotube reinforced novel polymer composites. <i>Carbon</i> , <b>2006</b> , 44, 383-386	10.4	18
43	The influence of GFP-actin expression on the adhesion dynamics of HepG2 cells on a model extracellular matrix. <i>Biomaterials</i> , <b>2005</b> , 26, 5348-58	15.6	18
42	Synthesis of Joint-Welded Carbon Nanotube Foam @ Ni(OH) <sub>2</sub> Nanosheet-Based Core-Shell 3D Architecture for Freestanding Flexible Electrode for Supercapacitor Applications. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900670	4.6	17
41	A Kinetic Model for Time-Dependent Fracture of Carbon Nanotubes. <i>Nano Letters</i> , <b>2004</b> , 4, 1139-1142	11.5	17
40	DEFECT-DEFECT INTERACTION IN SINGLE-WALLED CARBON NANOTUBES UNDER TORSIONAL LOADING. <i>International Journal of Modern Physics B</i> , <b>2010</b> , 24, 1215-1226	1.1	16
39	Influence of hydroxyapatite crystallization temperature and concentration on stress transfer in wet-spun nanohydroxyapatite-chitosan composite fibres. <i>Biomedical Materials (Bristol)</i> , <b>2008</b> , 3, 025014	3.5	16
38	Tensile behavior and morphology studies of glass-fiber-reinforced polymeric in situ hybrid composites. <i>Journal of Applied Polymer Science</i> , <b>2004</b> , 94, 211-221	2.9	16
37	Static and Dynamic Fatigue of Glass/Carbon Hybrid Composites in Fluid Environment. <i>Journal of Composite Materials</i> , <b>2002</b> , 36, 159-172	2.7	16
36	Development of watermelon rind derived activated carbon/manganese ferrite nanocomposite for cleaner desalination by capacitive deionization. <i>Journal of Cleaner Production</i> , <b>2020</b> , 272, 122626	10.3	16
35	A shaft-loaded blister test for elastic response and delamination behavior of thin film-substrate system. <i>Thin Solid Films</i> , <b>2003</b> , 424, 115-119	2.2	15
34	Tensile behaviour of modified bamboo/glass fibre reinforced hybrid composites. <i>Plastics, Rubber and Composites</i> , <b>2002</b> , 31, 422-431	1.5	14
33	Impact of Terminal End-Group of Acceptor-Donor-Acceptor-type Small Molecules on Molecular Packing and Photovoltaic Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 39952-39961	9.5	14
32	Facile Synthesis of Composition-Controlled Graphene-Supported PtPd Alloy Nanocatalysts and Their Applications in Methanol Electro-Oxidation and Lithium-Oxygen Batteries. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 17136-17143	4.8	12
31	Time-dependent fracture behavior of single-walled carbon nanotubes with and without Stone-Wales defects. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	12

30	Tensile behaviors of TiCT (MXene) films. <i>Nanotechnology</i> , <b>2020</b> , 31, 395704	3.4	12
29	Fabrication of transparent and conductive carbon nanotube/polyvinyl butyral films by a facile solution surface dip coating method. <i>Nanoscale</i> , <b>2011</b> , 3, 2469-71	7.7	11
28	Adhesion dynamics of porcine esophageal fibroblasts on extracellular matrix protein-functionalized poly(lactic acid). <i>Biomedical Materials (Bristol)</i> , <b>2008</b> , 3, 015014	3.5	10
27	MXene-carbon nanotubes layer-by-layer assembly based on-chip micro-supercapacitor with improved capacitive performance. <i>Electrochimica Acta</i> , <b>2021</b> , 386, 138420	6.7	10
26	Progress in Integrative Biomaterial Systems to Approach Three-Dimensional Cell Mechanotransduction. <i>Bioengineering</i> , <b>2017</b> , 4,	5.3	9
25	How long can single-walled carbon nanotube ropes last under static or dynamic fatigue?. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 083105	3.4	9
24	Force-strain relation of bundles of carbon nanotubes. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 033116	3.4	9
23	Viscoelastic properties of human mesenchymal stem cells. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2005</b> , 2005, 4854-7		8
22	Experimental estimation of friction energy within a bundle of single-walled carbon nanotubes. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 041914	3.4	7
21	Delamination behavior of film-substrate systems under cyclic loading. <i>Journal of Materials Science Letters</i> , <b>2000</b> , 19, 57-59		7
20	Molecular engineering of supercapacitor electrodes with monodispersed N-doped carbon nanoporous spheres. <i>New Journal of Chemistry</i> , <b>2019</b> , 43, 15892-15898	3.6	6
19	A comparative study of antioxidant-loaded carbon nanoparticles as drug delivery vehicles. <i>RSC Advances</i> , <b>2014</b> , 4, 56992-56997	3.7	6
18	How Sensitive Is the Elasticity of Hydroxyapatite-Nanoparticle-Reinforced Chitosan Composite to Changes in Particle Concentration and Crystallization Temperature?. <i>Journal of Functional Biomaterials</i> , <b>2015</b> , 6, 986-98	4.8	5
17	Characterization of uniaxial stiffness of extracellular matrix embedded with magnetic beads via bio-conjugation and under the influence of an external magnetic field. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 30, 253-65	4.1	5
16	Effect of cytoskeleton inhibitors on deadhesion kinetics of HepG2 cells on biomimetic surface. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2010</b> , 75, 67-74	6	4
15	In situ tensile strength degradation of glass fiber in polymer composite. <i>Scripta Materialia</i> , <b>2001</b> , 44, 785-789	5.6	4
14	High-Performance Fiber-Film Hybrid-Structured Wearable Strain Sensor from a Highly Robust and Conductive Carbonized Bamboo Aerogel.. <i>ACS Applied Bio Materials</i> , <b>2020</b> , 3, 8748-8756	4.1	4
13	Mechanical behavior of human embryonic stem cell pellet under unconfined compression. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2012</b> , 11, 703-14	3.8	3

12	Temporal effect of functional blocking of beta1 integrin on cell adhesion strength under serum depletion. <i>Langmuir</i> , <b>2009</b> , 25, 10939-47	4	3
11	Environmental fatigue behavior and life prediction of unidirectional glass/carbon/epoxy hybrid composites. <i>International Journal of Fatigue</i> , <b>2001</b> , 24, 847-847	5	3
10	Compression Response of a Fatigue-Loaded Composite Hip Prosthesis 243-243-15		3
9	Recent Trends in Synthesis and Applications of porous MXene Assemblies: A Topical Review.. <i>Chemical Record</i> , <b>2021</b> ,	6.6	2
8	A Novel Graphene Foam for Low and High Strains and Pressure Sensing Applications. <i>MRS Advances</i> , <b>2016</b> , 1, 27-32	0.7	2
7	Fabrication of all-in-one multifunctional phage liquid crystalline fibers. <i>RSC Advances</i> , <b>2013</b> , 3, 20437	3.7	1
6	A quantitative contour analysis of axisymmetric vesicles spontaneously adhering onto a substrate. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2004</b> , 34, 25-31	6	1
5	Experimental and theoretical characterization of the interfacial adhesion of 2D heterogeneous materials: A review. <i>Journal of Micromechanics and Molecular Physics</i> , 1-18	1.4	0
4	MXene/air-laid paper composite sensors for both tensile and torsional deformations detection. <i>Composites Communications</i> , <b>2021</b> , 25, 100768	6.7	0
3	Synergistic effect of carbon nanotube and graphene on multifunctional properties of their polymer composites <b>2015</b> , 527-548		
2	The electromechanical response of silicon nanowires to buckling mode transitions. <i>Nanotechnology</i> , <b>2010</b> , 21, 405505	3.4	
1	Extracting Piezoresistance in SiNWs using Thermal Induced Buckling of Micro-Bridges. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1186, 7		