

# Kin Liao

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/646961/kin-liao-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

101  
papers

5,804  
citations

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	Recent Trends in Synthesis and Applications of porous MXene Assemblies: A Topical Review.. <i>Chemical Record</i> , <b>2021</b> ,	6.6	2
100	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
99	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
98	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
97	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
96	Tensile behaviors of TiCT (MXene) films. <i>Nanotechnology</i> , <b>2020</b> , 31, 395704	3.4	12
95	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
94	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
93	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
92	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
91	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
90	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
89	Cellular Graphene: Fabrication, Mechanical Properties, and Strain-Sensing Applications. <i>Matter</i> , <b>2019</b> , 1, 1148-1202	12.7	24
88	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
87	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
86	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
85	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

84	A highly torsionable fiber-shaped supercapacitor. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4397-4403	13	20
83	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
82	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
81	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
80	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
79	Shape-Tunable Biphasic Janus Particles as pH-Responsive Switchable Surfactants. <i>Macromolecules</i> , <b>2017</b> , 50, 9276-9285	5.5	57
78	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
77	Progress in Integrative Biomaterial Systems to Approach Three-Dimensional Cell Mechanotransduction. <i>Bioengineering</i> , <b>2017</b> , 4,	5.3	9
76	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
75	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
74	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
73	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
72	Synergistic effect of carbon nanotube and graphene on multifunctional properties of their polymer composites <b>2015</b> , 527-548		
71	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
70	From cotton to wearable pressure sensor. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 2181-2187	13	127
69	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
68	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
67	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

66	Highly electrically conductive nanocomposites based on polymer-infused graphene sponges. <i>Scientific Reports</i> , <b>2014</b> , 4, 4652	4.9	41
65	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
64	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
63	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
62	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
61	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
60	Fabrication of all-in-one multifunctional phage liquid crystalline fibers. <i>RSC Advances</i> , <b>2013</b> , 3, 20437	3.7	1
59	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
58	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
57	Recognition of carbon nanotube chirality by phage display. <i>RSC Advances</i> , <b>2012</b> , 2, 1466-1476	3.7	24
56	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
55	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
54	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
53	Failure mechanisms of carbon nanotube fibers under different strain rates. <i>Carbon</i> , <b>2012</b> , 50, 2887-2893	10.4	63
52	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
51	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
50	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
49	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

48	Rupture of plasma membrane under tension. <i>Journal of Biomechanics</i> , <b>2011</b> , 44, 1361-6	2.9	18
47	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
46	The electromechanical response of silicon nanowires to buckling mode transitions. <i>Nanotechnology</i> , <b>2010</b> , 21, 405505	3.4	
45	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
44	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
43	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
42	Extracting Piezoresistance in SiNWs using Thermal Induced Buckling of Micro-Bridges. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1186, 7		
41	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
40	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
39	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
38	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
37	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
36	Viscoelastic behaviour of human mesenchymal stem cells. <i>BMC Cell Biology</i> , <b>2008</b> , 9, 40		70
35	Force-strain relation of bundles of carbon nanotubes. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 033116	3.4	9
34	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
33	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
32	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
31	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

30	Adhesion contact dynamics of primary hepatocytes on poly(ethylene terephthalate) surface. <i>Biomaterials</i> , <b>2005</b> , 26, 891-8	15.6	21
29	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
28	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
27	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
26	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
25	A nonlinear pullout model for unidirectional carbon nanotube-reinforced composites. <i>Composites Part B: Engineering</i> , <b>2004</b> , 35, 211-217	10	23
24	A Kinetic Model for Time-Dependent Fracture of Carbon Nanotubes. <i>Nano Letters</i> , <b>2004</b> , 4, 1139-1142	11.5	17
23	Environmental effects on bamboo-glass/polypropylene hybrid composites. <i>Journal of Materials Science</i> , <b>2003</b> , 38, 363-376	4.3	92
22	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
21	Adhesion contact dynamics of HepG2 cells on galactose-immobilized substrates. <i>Biomaterials</i> , <b>2003</b> , 24, 837-50	15.6	46
20	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
19	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
18	Nonlinear elastic properties of carbon nanotubes subjected to large axial deformations. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	41
17	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
16	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
15	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
14	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
13	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

12	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
11	Environmental fatigue of unidirectional glass-carbon fiber reinforced hybrid composite. <i>Composites Part B: Engineering</i> , <b>2001</b> , 32, 355-363	10	46
10	In situ tensile strength degradation of glass fiber in polymer composite. <i>Scripta Materialia</i> , <b>2001</b> , 44, 785-789	5.6	4
9	Interfacial characteristics of a carbon nanotube-polystyrene composite system. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 4225-4227	3.4	454
8	Characterization of bamboo-glass fiber reinforced polymer matrix hybrid composite. <i>Journal of Materials Science Letters</i> , <b>2000</b> , 19, 1873-1876		26
7	Delamination behavior of film-substrate systems under cyclic loading. <i>Journal of Materials Science Letters</i> , <b>2000</b> , 19, 57-59		7
6	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
5	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
4	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
3	Effects of environmental aging on the properties of pultruded GFRP. <i>Composites Part B: Engineering</i> , <b>1999</b> , 30, 485-493	10	137
2	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
1	Compression Response of a Fatigue-Loaded Composite Hip Prosthesis 243-243-15		3