

# Hsu-Chiang Kuan

## List of Publications by Year in descending order

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85  
papers

5,391  
citations

76326

40  
h-index

82547

72  
g-index

86  
all docs

86  
docs citations

86  
times ranked

5740  
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparative study of polymer nanocomposites containing multi-walled carbon nanotubes and graphene nanoplatelets. Nano Materials Science, 2022, 4, 185-204.	8.8	35
2	Epoxy/graphene nanocomposites prepared by in-situ microwaving. Carbon, 2021, 177, 271-281.	10.3	25
3	A facile approach to the scalable preparation of thermoplastic/carbon nanotube composites. Nanotechnology, 2020, 31, 195706.	2.6	8
4	A new method for preparation of functionalized graphene and its epoxy nanocomposites. Composites Part B: Engineering, 2020, 196, 108096.	12.0	41
5	Graphene platelets versus phosphorus compounds for elastomeric composites: flame retardancy, mechanical performance and mechanisms. Nanotechnology, 2019, 30, 385703.	2.6	30
6	Improving Thermal Stability of Polyurethane through the Addition of Hyperbranched Polysiloxane. Polymers, 2019, 11, 697.	4.5	32
7	Development of flame-retarding elastomeric composites with high mechanical performance. Composites Part A: Applied Science and Manufacturing, 2018, 109, 257-266.	7.6	26
8	Polymer composite hydrogels containing carbon nanomaterialsâ€™ Morphology and mechanical and functional performance. Progress in Polymer Science, 2018, 77, 1-18.	24.7	101
9	Filling natural microtubules with triphenyl phosphate for flame-retarding polymer composites. Composites Part A: Applied Science and Manufacturing, 2018, 115, 247-254.	7.6	25
10	Preparation of expandable graphite and its flame retardant properties in <scp>HDPE</scp> composites. Polymer Composites, 2017, 38, 2378-2386.	4.6	12
11	Novel polyacrylamide hydrogels by highly conductive, water-processable graphene. Composites Part A: Applied Science and Manufacturing, 2017, 93, 1-9.	7.6	26
12	Preparation and Flame Retardance of Polyurethane Composites Containing Microencapsulated Melamine Polyphosphate. Polymers, 2017, 9, 407.	4.5	20
13	Preparation, characterization of microencapsulated ammonium polyphosphate and its flame retardancy in polyurethane composites. Materials Chemistry and Physics, 2016, 173, 205-212.	4.0	39
14	Electrically conductive, mechanically robust, pH-sensitive graphene/polymer composite hydrogels. Composites Science and Technology, 2016, 127, 119-126.	7.8	99
15	PEDOT-based composites as electrode materials for supercapacitors. Nanotechnology, 2016, 27, 042001.	2.6	113
16	Facile Fabrication of Graphene Membranes with Readily Tunable Structures. ACS Applied Materials & Interfaces, 2015, 7, 13745-13757.	8.0	39
17	Smart thin-film piezoelectric composite sensors based on high lead zirconate titanate content. Structural Health Monitoring, 2015, 14, 214-227.	7.5	16
18	Preparation, characterization, and flame retardance of high-density polyethylene/sulfur-free expandable graphite composites. High Performance Polymers, 2014, 26, 798-809.	1.8	5

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19	Toughening polymer adhesives using nanosized elastomeric particles. Journal of Materials Research, 2014, 29, 665-674.	2.6	29
20	Preparation of expandable graphite via ozone-hydrothermal process and flame-retardant properties of high-density polyethylene composites. High Performance Polymers, 2014, 26, 34-42.	1.8	5
21	Nanosilica-toughened polymer adhesives. Materials & Design, 2014, 61, 75-86.	5.1	50
22	Development of polymer composites using modified, high-structural integrity graphene platelets. Composites Science and Technology, 2014, 91, 82-90.	7.8	136
23	Effect of interface modification on PMMA/graphene nanocomposites. Journal of Materials Science, 2014, 49, 5838-5849.	3.7	28
24	Preparation and properties of novel epoxy/graphene oxide nanosheets (GON) composites functionalized with flame retardant containing phosphorus and silicon. Materials Chemistry and Physics, 2014, 146, 354-362.	4.0	72
25	Processable 3-nm thick graphene platelets of high electrical conductivity and their epoxy composites. Nanotechnology, 2014, 25, 125707.	2.6	119
26	Study on thermal degradation and flame retardant property of halogen-free polypropylene composites using XPS and cone calorimeter. Journal of Applied Polymer Science, 2013, 127, 1084-1091.	2.6	30
27	A novel approach to electrically and thermally conductive elastomers using graphene. Polymer, 2013, 54, 3663-3670.	3.8	124
28	Covalently bonded interfaces for polymer/graphene composites. Journal of Materials Chemistry A, 2013, 1, 4255.	10.3	163
29	Melt compounding with graphene to develop functional, high-performance elastomers. Nanotechnology, 2013, 24, 165601.	2.6	124
30	Preparation, Characterization, Thermal, and Flame-Retardant Properties of Green Silicon-Containing Epoxy/Functionalized Graphene Nanosheets Composites. Journal of Nanomaterials, 2013, 2013, 1-10.	2.7	22
31	Synthesis, characterization, and properties of silane-functionalized expandable graphite composites. Journal of Composite Materials, 2012, 46, 1483-1496.	2.4	10
32	Preparation, thermal stability and flame-retardant properties of halogen-free polypropylene composites. High Performance Polymers, 2012, 24, 478-487.	1.8	20
33	From carbon nanotubes and silicate layers to graphene platelets for polymer nanocomposites. Nanoscale, 2012, 4, 4578.	5.6	181
34	Preparation of expandable graphite via $H_2O_2$ -hydrothermal process and its effect on properties of high-density polyethylene composites. Polymer Composites, 2012, 33, 872-880.	4.6	25
35	A Facile Approach to Chemically Modified Graphene and its Polymer Nanocomposites. Advanced Functional Materials, 2012, 22, 2735-2743.	14.9	244
36	Preparation, thermal stability and electrical properties of PMMA/functionalized graphene oxide nanosheets composites. Materials Chemistry and Physics, 2012, 134, 677-685.	4.0	64

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37	Effect of maleic anhydride modified MWCNTs on the morphology and dynamic mechanical properties of its PMMA composites. Materials Chemistry and Physics, 2011, 129, 1214-1220.	4.0	29
38	Preparation of expandable graphite using a hydrothermal method and flame-retardant properties of its halogen-free flame-retardant HDPE composites. Journal of Polymer Research, 2011, 18, 483-488.	2.4	35
39	Fabrication, Structure and Properties of Epoxy/Metal Nanocomposites. Macromolecular Materials and Engineering, 2011, 296, 465-474.	3.6	54
40	Interface-tuned epoxy/clay nanocomposites. Polymer, 2011, 52, 497-504.	3.8	76
41	Epoxy/graphene platelets nanocomposites with two levels of interface strength. Polymer, 2011, 52, 1603-1611.	3.8	466
42	Preparation, characterization, and thermal stability of novel PMMA/expandable graphite halogen-free flame retardant composites. Polymer Composites, 2010, 31, 18-24.	4.6	16
43	Preparation and characterization of carbon nanotubes/epoxy resin nano-prepreg for nanocomposites. Journal of Physics and Chemistry of Solids, 2010, 71, 431-435.	4.0	13
44	Flame retardance and thermal stability of carbon nanotube epoxy composite prepared from sol-gel method. Journal of Physics and Chemistry of Solids, 2010, 71, 539-543.	4.0	120
45	A reactive polymer for toughening epoxy resin. Journal of Applied Polymer Science, 2010, 115, 3265-3272.	2.6	51
46	Structure-property relations of 55nm particle-toughened epoxy. Polymer, 2010, 51, 4867-4879.	3.8	105
47	Recycled PCB flour reinforced linear low-density polyethylene composites enhanced by water cross-linking reaction. Asia-Pacific Journal of Chemical Engineering, 2009, 4, 169-177.	1.5	0
48	Synthesis, characterization, and thermal stability of PMMA/SiO <sub>2</sub> /TiO <sub>2</sub> tertiary nanocomposites via non-hydrolytic sol-gel method. Journal of Applied Polymer Science, 2009, 113, 1959-1965.	2.6	26
49	Development of a novel toughener for epoxy resins. Polymer International, 2009, 58, 838-845.	3.1	58
50	Mechanical and electrical properties of multi-wall carbon nanotube/poly(lactic acid) composites. Journal of Physics and Chemistry of Solids, 2008, 69, 1395-1398.	4.0	126
51	Multi-walled carbon nanotube reinforced poly (l-lactic acid) nanocomposites enhanced by water-crosslinking reaction. Journal of Physics and Chemistry of Solids, 2008, 69, 1399-1402.	4.0	47
52	Molecular motion, morphology, and thermal properties of multiwall carbon nanotube/polysilsesquioxane composite. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 472-482.	2.1	16
53	Synthesis, characterization, flame retardance and thermal properties of halogen-free expandable graphite/PMMA composites prepared from sol-gel method. Polymer Degradation and Stability, 2008, 93, 1357-1363.	5.8	40
54	Effect of inorganic nanoparticles on mechanical property, fracture toughness and toughening mechanism of two epoxy systems. Polymer, 2008, 49, 3510-3523.	3.8	238

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55	EFFECT OF POWDER SURFACE CHARGE ON THE RHEOLOGICAL BEHAVIORS OF POWDERPOLYMER BLENDS. Journal of Polymer Engineering, 2007, 27, .	1.4	0
56	Preparation and thermal, electrical, and morphological properties of multiwalled carbon nanotubeand epoxy composites. Journal of Applied Polymer Science, 2007, 103, 1272-1278.	2.6	110
57	Preparation, morphology and properties of acid and amine modified multiwalled carbon nanotube/polyimide composite. Composites Science and Technology, 2007, 67, 2564-2573.	7.8	229
58	The preparation of carbon nanotube/linear low density polyethylene composites by a water-crosslinking reaction. Materials Letters, 2007, 61, 2744-2748.	2.6	27
59	Mechanical, thermal and morphological properties of water-crosslinked wood flour reinforced linear low-density polyethylene composites. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1696-1707.	7.6	59
60	Sulfonated poly(ether ether ketone)/poly(vinylpyrrolidone) acid-base polymer blends for direct methanol fuel cell application. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 565-572.	2.1	54
61	Morphology, electrical resistance, electromagnetic interference shielding and mechanical properties of functionalized MWNT and poly(urea urethane) nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1096-1105.	2.1	46
62	Preparation and characterization of the novel water-crosslinked cellulose reinforced poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	7.8	46
63	Polystyrene nanocomposite materialsâ€™Preparation, mechanical, electrical and thermal properties, and morphology. Journal of Applied Polymer Science, 2006, 100, 508-515.	2.6	64
64	Flame retardancy and nondripping properties of ammonium polyphosphate/poly(butylene succinate) composites enhanced by water crosslinking. Journal of Applied Polymer Science, 2006, 102, 2935-2945.	2.6	25
65	Study on the Polydimethylsiloxane Polyurethane Modified Novolac Type Epoxy Precursor for Manufacturing Carbonâ€™Carbon Composites. Journal of Composite Materials, 2006, 40, 717-731.	2.4	2
66	Synthesis, thermal, mechanical and rheological properties of multiwall carbon nanotube/waterborne polyurethane nanocomposite. Composites Science and Technology, 2005, 65, 1703-1710.	7.8	373
67	Thermal and mechanical properties of silane-grafted water crosslinked polyethylene. Journal of Applied Polymer Science, 2005, 96, 2383-2391.	2.6	58
68	Polystyrene nanocomposite materials: Preparation, morphology, and mechanical, electrical, and thermal properties. Journal of Applied Polymer Science, 2005, 98, 2266-2273.	2.6	34
69	A New Strategy to Exfoliate Silicone Rubber/Clay Nanocomposites. Macromolecular Rapid Communications, 2005, 26, 830-833.	3.9	61
70	Synthesis and characterization of polysilicic acid nanoparticles/waterborne polyurethane nanocomposite. Journal of Materials Science, 2005, 40, 6063-6070.	3.7	25
71	Synthesis and characterization of a clay/waterborne polyurethane nanocomposite. Journal of Materials Science, 2005, 40, 179-185.	3.7	41
72	Hydrogen bonding, mechanical properties, and surface morphology of clay/waterborne polyurethane nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1-12.	2.1	47

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73	Preparation and electromagnetic interference shielding characteristics of novel carbon-nanotube/siloxane/poly-(urea urethane) nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 345-358.	2.1	79
74	Hydrogen-bonding, crystallinity, and morphological properties of poly(silicic acid)/waterborne polyurethane nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1076-1089.	2.1	4
75	Molecular mobility of free-radical-functionalized carbon-nanotube/siloxane/poly(urea urethane) nanocomposites. Journal of Polymer Science Part A, 2005, 43, 6084-6094.	2.3	50
76	Preparation and Properties of Toughened Novolac Type Phenolic/SiO <sub>2</sub> Flame Retardant Nanocomposite. , 2004, , 742-747.		0
77	Synthesis, Thermal Properties and Flame Retardance of Novel Phenolic Resin/Silica Nanocomposites. , 2004, , 748-753.		0
78	Processability, Thermal, Mechanical, and Morphological Properties of Novolac Type-Epoxy Resin-Based Carbon-Carbon Composite. Journal of Composite Materials, 2004, 38, 311-320.	2.4	8
79	Preparation, electrical, mechanical and thermal properties of composite bipolar plate for a fuel cell. Journal of Power Sources, 2004, 134, 7-7.	7.8	15
80	Title is missing!. Journal of Materials Science, 2003, 38, 3933-3944.	3.7	10
81	Effects of swelling agents on the crystallization behavior and mechanical properties of polyamide 6/clay nanocomposites. Journal of Applied Polymer Science, 2003, 88, 1686-1693.	2.6	55
82	Thermo-oxidative degradation of novel epoxy containing silicon and phosphorous nanocomposites. European Polymer Journal, 2003, 39, 825-830.	5.4	47
83	Preparation, characterization, and properties of novolac-type phenolic/SiO <sub>2</sub> hybrid organic-inorganic nanocomposite materials by sol-gel method. Journal of Polymer Science Part A, 2003, 41, 905-913.	2.3	131
84	Effects of molecular weight and molecular structure of low profile additives on the properties of bulk molding compound (BMC). Polymer Engineering and Science, 2003, 43, 989-998.	3.1	9
85	Processability, morphology and mechanical properties of wood flour reinforced high density polyethylene composites. Plastics, Rubber and Composites, 2003, 32, 122-126.	2.0	27