

# Ke Wang

## List of Publications by Year in descending order

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81  
papers

3,185  
citations

126858

33  
h-index

155592

55  
g-index

81  
all docs

81  
docs citations

81  
times ranked

2333  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen-bond-dominated mechanical stretchability in PVA films: from phenomenological to numerical insights. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 1885-1895.	1.3	18
2	The effect of filler permittivity on the dielectric properties of polymer-based composites. <i>Composites Science and Technology</i> , 2022, 222, 109342.	3.8	20
3	Pursuit of the correlation between yield strength and crystallinity in sintering-molded UHMWPE. <i>Polymer</i> , 2021, 215, 123352.	1.8	24
4	Exploring formation rationale of skin-core heterogeneity during PVA solutions evaporation by laser-induced fluorescence analysis. <i>Polymer</i> , 2021, 224, 123759.	1.8	5
5	Towards high-performance all-polyethylene materials by a two-step processing strategy using two-roll mill. <i>Polymer</i> , 2021, 228, 123956.	1.8	9
6	Influence of molecular weight on molding efficiency and properties of sintered UHMWPE thick-size products. <i>Journal of Polymer Research</i> , 2021, 28, 1.	1.2	1
7	Rheological behaviours of guar gum derivatives with hydrophobic unsaturated long-chains. <i>RSC Advances</i> , 2020, 10, 32050-32057.	1.7	9
8	Structural origins of mechanical strengthening in poly(phenylene sulfide)/multiwalled carbon nanotube nanocomposites obtained via hot stretching. <i>Polymer Composites</i> , 2019, 40, E589.	2.3	5
9	Realizing mechanically reinforced all-polyethylene material by dispersing UHMWPE via high-speed shear extrusion. <i>Polymer</i> , 2019, 180, 121711.	1.8	20
10	Realizing self-reinforcement of polyethylene via high-speed shear processing. <i>Journal of Polymer Research</i> , 2019, 26, 1.	1.2	6
11	Exploitation of a promising flame-retardant engineering plastics by molten composited polyketone and diethyl zinc phosphinate. <i>Polymers for Advanced Technologies</i> , 2019, 30, 1978-1988.	1.6	4
12	Correlations between microstructure of $\beta$ -form nuclei and polymorphism of shear-induced iPP/carbon fiber cylindrite. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2019, 57, 368-377.	2.4	9
13	Polymorphic structures phase diagram of shear-induced isotactic polypropylene/carbon fiber cylindrites. <i>Materials and Design</i> , 2018, 150, 40-48.	3.3	9
14	A comparison study of high shear force and compatibilizer on the phase morphologies and properties of polypropylene/polylactide (PP/PLA) blends. <i>Polymer</i> , 2018, 154, 119-127.	1.8	47
15	Largely enhanced thermal conductivity of HDPE/boron nitride/carbon nanotubes ternary composites via filler network-network synergy and orientation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 32-39.	3.8	84
16	Largely Improved Stretch Ductility and $\beta$ -Form Room-temperature Durability of Poly(vinylidene fluoride) /Overlock 10 Tf 50 14 2018, 36, 1277-1285.	2.0	8
17	Crystallographic features of poly(vinylidene fluoride) film upon an attractive substrate of KBr. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 27828-27838.	1.3	6
18	Facilely assess the soluble behaviour of the $\beta$ -nucleating agent by gradient temperature field for the construction of heterogeneous crystalline-frameworks in iPP. <i>Soft Matter</i> , 2016, 12, 594-601.	1.2	25

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19	Manipulation of multiphase morphology in the reactive blending system OBC/PLA/EGMA. RSC Advances, 2015, 5, 96353-96359.	1.7	13
20	Reduction of graphene oxide with the presence of polypropylene micro-latex for facile preparation of polypropylene/graphene nanosheet composites. Colloid and Polymer Science, 2015, 293, 1495-1503.	1.0	10
21	Enhanced interfacial adhesion via interfacial crystallization between sisal fiber and isotactic polypropylene: direct evidence from single-fiber fragmentation testing. Polymer International, 2014, 63, 646-651.	1.6	19
22	Control of the hierarchical structure of polymer articles via "structuring" processing. Progress in Polymer Science, 2014, 39, 891-920.	11.8	71
23	Brittle"ductile transition behavior of poly(ethylene terephthalate)/poly(ethylene-octene) blend: the roles of compatibility and test temperature. Journal of Materials Science, 2014, 49, 1794-1804.	1.7	10
24	Preparation of polypropylene/graphite nanocomposite with the aids of rotating solid-state mixing and dynamic packing injection molding. Polymer Composites, 2014, 35, 1943-1951.	2.3	5
25	Transcrystalline formation and properties of polypropylene on the surface of ramie fiber as induced by shear or dopamine modification. Polymer, 2014, 55, 3045-3053.	1.8	37
26	Interfacial crystallization enhanced interfacial interaction of Poly (butylene succinate)/ramie fiber biocomposites using dopamine as a modifier. Composites Science and Technology, 2014, 91, 22-29.	3.8	89
27	Simultaneous the thermodynamics favorable compatibility and morphology to achieve excellent comprehensive mechanics in PLA/OBC blend. Polymer, 2014, 55, 6409-6417.	1.8	61
28	Effect of melting temperature on interfacial interaction and mechanical properties of polypropylene (PP) fiber reinforced olefin block copolymers (OBCs). RSC Advances, 2014, 4, 45234-45243.	1.7	16
29	Comparison of the toughening behavior for poly(ethylene terephthalate) with spherulitic or ellipsoid elastomer-particles. Journal of Polymer Research, 2014, 21, 1.	1.2	3
30	Exploring interfacial enhancement in polystyrene/multiwalled carbon nanotube monofilament induced by stretching. Composites Part A: Applied Science and Manufacturing, 2014, 61, 84-90.	3.8	11
31	Superior toughness obtained via tuning the compatibility of poly(ethylene Terephthalate)/poly(ethylene-octene) blend. Journal of Polymer Research, 2014, 21, 1.	1.2	3
32	Synergistic effects of polyethylene glycol and ammonium polyphosphate on intumescent flame-retardant polypropylene. Polymer Engineering and Science, 2013, 53, 410-416.	1.5	11
33	Hierarchical structure and unique impact behavior of polypropylene/ethylene-octene copolymer blends as obtained via dynamic packing injection molding. Polymer, 2013, 54, 3392-3401.	1.8	51
34	Enhanced crystallization behaviors of poly(ethylene terephthalate) via adding expanded graphite and poly(ethylene glycol). Colloid and Polymer Science, 2013, 291, 911-917.	1.0	6
35	Interfacial strength and mechanical properties of biocomposites based on ramie fibers and poly(butylene succinate). RSC Advances, 2013, 3, 26418.	1.7	44
36	Homogeneous synthesis of hydroxypropyl guar gum in an ionic liquid 1-butyl-3-methylimidazolium chloride. Carbohydrate Polymers, 2013, 93, 686-690.	5.1	7

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37	Oscillatory shear-accelerated exfoliation of graphite in polypropylene melt during injection molding. Chinese Journal of Polymer Science (English Edition), 2013, 31, 98-109.	2.0	18
38	Synergistic effects of $\hat{I}^2$ -modification and impact polypropylene copolymer on brittle-ductile transition of polypropylene random copolymer. Journal of Applied Polymer Science, 2013, 129, 3613-3622.	1.3	15
39	Thermal annealing-induced superior toughness in polypropylene/poly(ethylene glycol) blend and its structural origin. Polymer Engineering and Science, 2013, 53, 2053-2060.	1.5	6
40	Realizing the enhancement of interfacial interaction in semicrystalline polymer/filler composites via interfacial crystallization. Progress in Polymer Science, 2012, 37, 1425-1455.	11.8	355
41	Enhancement of $\hat{I}^2$ -nucleated crystallization in polypropylene random copolymer via adding isotactic polypropylene. Polymer, 2012, 53, 4861-4870.	1.8	29
42	Acid-modified carbon nanotubes distribution and mechanical enhancement in polystyrene/elastomer blends. Polymer Engineering and Science, 2012, 52, 964-971.	1.5	4
43	Interfacial enhancement of maleated polypropylene/silica composites using graphene oxide. Journal of Applied Polymer Science, 2012, 125, E348.	1.3	33
44	Unusual rheological characteristics of polypropylene/organoclay nanocomposites in continuous cooling process. Journal of Applied Polymer Science, 2012, 125, E292.	1.3	2
45	Exploring temperature dependence of the toughening behavior of $\hat{I}^2$ -nucleated impact polypropylene copolymer. Polymer, 2012, 53, 1783-1790.	1.8	42
46	Combined effect of $\hat{I}^2$ -nucleating agent and multi-walled carbon nanotubes on polymorphic composition and morphology of isotactic polypropylene. Journal of Thermal Analysis and Calorimetry, 2012, 107, 733-743.	2.0	41
47	Cooperative effect of shear and nanoclay on the formation of polar phase in poly(vinylidene fluoride) and the resultant properties. Polymer, 2011, 52, 4970-4978.	1.8	43
48	One-step synthesis of glucose-branched galactomannan. Carbohydrate Research, 2011, 346, 1973-1977.	1.1	5
49	Effects of matrix molecular weight on structure and reinforcement of high density polyethylene/mica composites. Chinese Journal of Polymer Science (English Edition), 2011, 29, 377-389.	2.0	11
50	The variable role of clay on the crystallization behavior of DMDBS-nucleated polypropylene. Chinese Journal of Polymer Science (English Edition), 2011, 29, 732-740.	2.0	8
51	Polystyrene-wrapping multi-walled carbon nanotubes obtained via simple physical modification of melt mixing. Polymers for Advanced Technologies, 2011, 22, 1359-1365.	1.6	5
52	Dependence of mechanical properties on $\hat{I}^2$ -form content and crystalline morphology for $\hat{I}^2$ -nucleated isotactic polypropylene. Polymers for Advanced Technologies, 2011, 22, 2044-2054.	1.6	74
53	Ordered long-helical conformation of isotactic polypropylene obtained in constrained environment of nanoclay. Polymers for Advanced Technologies, 2011, 22, 1375-1380.	1.6	10
54	Toughening of polypropylene with crystallizable poly(ethylene oxide). Polymer International, 2011, 60, 781-786.	1.6	6

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55	Effect of whiskers nucleation ability and shearing function on the interfacial crystal morphology of polyethylene (PE)/raw whiskers composites. <i>Composites Part B: Engineering</i> , 2011, 42, 631-637.	5.9	28
56	Fabrication of polypropylene/carbon nanotubes composites via a sequential process of (rotating) Tj ETQq0 0 0 rgBT <sub>3</sub> /Overlock 10 Tf 50 7	3.8	20
57	Synergistic toughening of polypropylene random copolymer at low temperature: Î²-Modification and annealing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 7052-7059.	2.6	63
58	New insight on the annealing induced microstructural changes and their roles in the toughening of Î²-form polypropylene. <i>Polymer</i> , 2011, 52, 2351-2360.	1.8	128
59	Realizing the full nanofiller enhancement in melt-spun fibers of poly(vinylidene fluoride)/carbon nanotube composites. <i>Nanotechnology</i> , 2011, 22, 355707.	1.3	28
60	Superior Reinforcement in Melt-Spun Polyethylene/Multiwalled Carbon Nanotube Fiber through Formation of a Shish-Kebab Structure. <i>Journal of Physical Chemistry B</i> , 2010, 114, 10693-10702.	1.2	79
61	Hierarchical structure of injection-molded bars of HDPE/MWCNTs composites with novel nanohybrid shish-kebab. <i>Polymer</i> , 2010, 51, 774-782.	1.8	55
62	Orientation in high-density polyethylene/inorganic whisker composite fibers as studied via polarized Fourier transform infrared spectroscopy. <i>Composites Science and Technology</i> , 2010, 70, 685-691.	3.8	18
63	The effect of shear on mechanical properties and orientation of HDPE/mica composites obtained via dynamic packing injection molding (DPIM). <i>Polymers for Advanced Technologies</i> , 2010, 21, 48-54.	1.6	16
64	Polypropylene Injection Molded Part with Novel Macroscopic Bamboo-like Bionic Structure. <i>Journal of Physical Chemistry B</i> , 2010, 114, 9994-10001.	1.2	44
65	Rheologically determined negative influence of increasing nucleating agent content on the crystallization of isotactic polypropylene. <i>Polymer</i> , 2009, 50, 696-706.	1.8	34
66	Interfacial enhancement by shish-calabash crystal structure in polypropylene/inorganic whisker composites. <i>Polymer</i> , 2009, 50, 3851-3856.	1.8	40
67	Direct Formation of Nanohybrid Shish-Kebab in the Injection Molded Bar of Polyethylene/Multiwalled Carbon Nanotubes Composite. <i>Macromolecules</i> , 2009, 42, 7016-7023.	2.2	159
68	New Understanding in Tuning Toughness of Î²-Polypropylene: The Role of Î²-Nucleated Crystalline Morphology. <i>Macromolecules</i> , 2009, 42, 9325-9331.	2.2	274
69	Shear enhanced interfacial interaction between carbon nanotubes and polyethylene and formation of nanohybrid shish-kebabs. <i>Polymer</i> , 2008, 49, 4925-4929.	1.8	35
70	Molecular Weight Dependence of Hybrid Shish Kebab Structure in Injection Molded Bar of Polyethylene/Inorganic Whisker Composites. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14140-14148.	1.2	54
71	Inverse Temperature Dependence of Strain Hardening in Ultrahigh Molecular Weight Polyethylene: A Role of Lamellar Coupling and Entanglement Density. <i>Journal of Physical Chemistry B</i> , 2007, 111, 13206-13210.	1.2	30
72	Observation of Shear-Induced Hybrid Shish Kebab in the Injection Molded Bars of Linear Polyethylene Containing Inorganic Whiskers. <i>Macromolecules</i> , 2007, 40, 8533-8536.	2.2	82

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73	Shear-induced epitaxial crystallization in injection-molded bars of high-density polyethylene/isotactic polypropylene blends. <i>Polymer</i> , 2007, 48, 4529-4536.	1.8	35
74	Crystal morphology and tensile properties of LLDPE containing PP fibers as obtained via dynamic packing injection molding. <i>Polymer</i> , 2006, 47, 7115-7122.	1.8	45
75	The hierarchy structure and orientation of high density polyethylene obtained via dynamic packing injection molding. <i>Polymer</i> , 2006, 47, 6857-6867.	1.8	78
76	Facilitating transcrystallization of polypropylene/glass fiber composites by imposed shear during injection molding. <i>Polymer</i> , 2006, 47, 8374-8379.	1.8	73
77	Epitaxy growth and directed crystallization of high-density polyethylene in the oriented blends with isotactic polypropylene. <i>Polymer</i> , 2005, 46, 5258-5267.	1.8	37
78	Shear amplification and re-crystallization of isotactic polypropylene from an oriented melt in presence of oriented clay platelets. <i>Polymer</i> , 2005, 46, 9022-9032.	1.8	40
79	Tensile properties in the oriented blends of high-density polyethylene and isotactic polypropylene obtained by dynamic packing injection molding. <i>Polymer</i> , 2005, 46, 3190-3198.	1.8	66
80	An observation of accelerated exfoliation in iPP/organoclay nanocomposite as induced by repeated shear during melt solidification. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 2005-2012.	2.4	24
81	The interplay of thermodynamics and shear on the dispersion of polymer nanocomposite. <i>Polymer</i> , 2004, 45, 7953-7960.	1.8	97