Hua Deng

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2787027/publications.pdf

Version: 2024-02-01

87 papers	6,313 citations	70961 41 h-index	66788 78 g-index
87 all docs	87 docs citations	87 times ranked	5829 citing authors

#	Article	IF	Citations
1	Progress on the morphological control of conductive network in conductive polymer composites and the use as electroactive multifunctional materials. Progress in Polymer Science, 2014, 39, 627-655.	11.8	553
2	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
3	New Understanding in Tuning Toughness of Î²-Polypropylene: The Role of Î²-Nucleated Crystalline Morphology. Macromolecules, 2009, 42, 9325-9331.	2.2	274
4	Towards Tunable Sensitivity of Electrical Property to Strain for Conductive Polymer Composites Based on Thermoplastic Elastomer. ACS Applied Materials & Interfaces, 2013, 5, 5815-5824.	4.0	237
5	Strain sensing behaviour of elastomeric composite films containing carbon nanotubes under cyclic loading. Composites Science and Technology, 2013, 74, 1-5.	3.8	221
6	Tailoring Impact Toughness of Poly(<scp>l</scp>-lactide)/Poly(Îµ-caprolactone) (PLLA/PCL) Blends by Controlling Crystallization of PLLA Matrix. ACS Applied Materials & Interfaces, 2012, 4, 897-905.	4.0	218
7	Control of Crystal Morphology in Poly(<scp>l</scp>-lactide) by Adding Nucleating Agent. Macromolecules, 2011, 44, 1233-1237.	2.2	203
8	A simple and efficient method to prepare graphene by reduction of graphite oxide with sodium hydrosulfite. Nanotechnology, 2011, 22, 045704.	1.3	190
9	The resistivityâ€“strain behavior of conductive polymer composites: stability and sensitivity. Journal of Materials Chemistry A, 2014, 2, 17085-17098.	5.2	185
10	Recent progress on PEDOT:PSS based polymer blends and composites for flexible electronics and thermoelectric devices. Materials Chemistry Frontiers, 2020, 4, 3130-3152.	3.2	161
11	Conductive network formation in the melt of carbon nanotube/thermoplastic polyurethane composite. Composites Science and Technology, 2009, 69, 1499-1504.	3.8	160
12	Controlling the dynamic percolation of carbon nanotube based conductive polymer composites by addition of secondary nanofillers: The effect on electrical conductivity and tuneable sensing behaviour. Composites Science and Technology, 2013, 74, 85-90.	3.8	149
13	Fabrication and property prediction of conductive and strain sensing TPU/CNT nanocomposite fibres. Journal of Materials Chemistry, 2010, 20, 9449.	6.7	147
14	Significantly Improving Oxygen Barrier Properties of Polylactide via Constructing Parallel-Aligned Shish-Kebab-Like Crystals with Well-Interlocked Boundaries. Biomacromolecules, 2014, 15, 1507-1514.	2.6	147
15	Recent progress on thermal conductive and electrical insulating polymer composites. Composites Communications, 2018, 8, 74-82.	3.3	135
16	Effect of melting and crystallization on the conductive network in conductive polymer composites. Polymer, 2009, 50, 3747-3754.	1.8	132
17	New insight on the annealing induced microstructural changes and their roles in the toughening of Î²-form polypropylene. Polymer, 2011, 52, 2351-2360.	1.8	128
18	Carbon nanotube polymer coatings for textile yarns with good strain sensing capability. Sensors and Actuators A: Physical, 2012, 179, 83-91.	2.0	125

#	Article	IF	Citations
19	Preparation of Highâ€Performance Conductive Polymer Fibers through Morphological Control of Networks Formed by Nanofillers. Advanced Functional Materials, 2010, 20, 1424-1432.	7.8	117
20	Selective localization of multi-walled carbon nanotubes in thermoplastic elastomer blends: An effective method for tunable resistivityâ€“strain sensing behavior. Composites Science and Technology, 2014, 92, 16-26.	3.8	116
21	The preparation of high performance and conductive poly (vinyl alcohol)/graphene nanocomposite via reducing graphite oxide with sodium hydrosulfite. Composites Science and Technology, 2011, 71, 1266-1270.	3.8	113
22	Formation of Conductive Networks with Both Segregated and Double-Percolated Characteristic in Conductive Polymer Composites with Balanced Properties. ACS Applied Materials & Interfaces, 2014, 6, 6835-6844.	4.0	92
23	The optimization of thermoelectric properties in a PEDOT:PSS thin film through post-treatment. RSC Advances, 2015, 5, 1910-1917.	1.7	85
24	Towards tunable resistivityâ€“strain behavior through construction of oriented and selectively distributed conductive networks in conductive polymer composites. Journal of Materials Chemistry A, 2014, 2, 10048-10058.	5.2	82
25	Fabrication of Highly Stretchable, Washable, Wearable, Water-Repellent Strain Sensors with Multi-Stimuli Sensing Ability. ACS Applied Materials & Interfaces, 2018, 10, 31655-31663.	4.0	82
26	Anisotropic multilayer conductive networks in carbon nanotubes filled polyethylene/polypropylene blends obtained through high speed thin wall injection molding. Polymer, 2013, 54, 6425-6436.	1.8	81
27	Superior Reinforcement in Melt-Spun Polyethylene/Multiwalled Carbon Nanotube Fiber through Formation of a Shish-Kebab Structure. Journal of Physical Chemistry B, 2010, 114, 10693-10702.	1.2	79
28	Fabrication of Highly Stretchable Conductors via Morphological Control of Carbon Nanotube Network. Small, 2013, 9, 3620-3629.	5.2	74
29	Significant Enhancement of Thermal Conductivity in Polymer Composite via Constructing Macroscopic Segregated Filler Networks. ACS Applied Materials & Interfaces, 2017, 9, 29071-29081.	4.0	74
30	Stretchable and Healable Conductive Elastomer Based on PEDOT:PSS/Natural Rubber for Self-Powered Temperature and Strain Sensing. ACS Applied Materials & Interfaces, 2021, 13, 14599-14611.	4.0	73
31	Preparation of high performance conductive polymer fibres from double percolated structure. Journal of Materials Chemistry, 2011, 21, 6401.	6.7	71
32	The preparation and properties of polystyrene/functionalized graphene nanocomposite foams using supercritical carbon dioxide. Polymer International, 2013, 62, 1077-1084.	1.6	64
33	Modified resistivityâ€“strain behavior through the incorporation of metallic particles in conductive polymer composite fibers containing carbon nanotubes. Polymer International, 2013, 62, 134-140.	1.6	62
34	Graphene/thermoplastic polyurethane nanocomposites: Surface modification of graphene through oxidation, polyvinyl pyrrolidone coating and reduction. Composites Part A: Applied Science and Manufacturing, 2015, 68, 264-275.	3.8	58
35	A Novel Concept for Highly Oriented Carbon Nanotube Composite Tapes or Fibres with High Strength and Electrical Conductivity. Macromolecular Materials and Engineering, 2009, 294, 749-755.	1.7	56
36	Hierarchical structure of injection-molded bars of HDPE/MWCNTs composites with novel nanohybrid shishâ€“kebab. Polymer, 2010, 51, 774-782.	1.8	55

#	Article	IF	Citations
37	Recent progress in solar photothermal steam technology for water purification and energy utilization. Chemical Engineering Journal, 2022, 448, 137603.	6.6	53
38	Towards high-performance poly(<scp>l</scp>-lactide)/elastomer blends with tunable interfacial adhesion and matrix crystallization via constructing stereocomplex crystallites at the interface. RSC Advances, 2014, 4, 49374-49385.	1.7	52
39	Effect of annealing on the microstructure and mechanical properties of polypropylene with oriented shishâ€kebab structure. Polymer International, 2012, 61, 252-258.	1.6	47
40	Nickel hydroxide as novel filler for high energy density dielectric polymer composites. Composites Science and Technology, 2019, 172, 117-124.	3.8	47
41	Improving high-temperature energy storage performance of PI dielectric capacitor films through boron nitride interlayer. Advanced Composites and Hybrid Materials, 2022, 5, 238-249.	9.9	47
42	Biomimetic Approach to Facilitate the High Filler Content in Free-Standing and Flexible Thermoelectric Polymer Composite Films Based on PVDF and Ag₂Se Nanowires. ACS Applied Materials & Interfaces, 2020, 12, 51506-51516.	4.0	45
43	Ultrasensitive Thin-Film Pressure Sensors with a Broad Dynamic Response Range and Excellent Versatility Toward Pressure, Vibration, Bending, and Temperature. ACS Applied Materials & Interfaces, 2020, 12, 20998-21008.	4.0	40
44	Enhanced thermal conductivity and electrical insulation properties of polymer composites via constructing Pglass/CNTs confined hybrid fillers. Composites Part A: Applied Science and Manufacturing, 2018, 115, 1-7.	3.8	39
45	Effect of thermal annealing on the electrical conductivity of high-strength bicomponent polymer tapes containing carbon nanofillers. Synthetic Metals, 2010, 160, 337-344.	2.1	37
46	Enhanced thermoelectric properties of PEDOT:PSS films via a novel two-step treatment. RSC Advances, 2015, 5, 105592-105599.	1.7	36
47	Confine Clay in an Alternating Multilayered Structure through Injection Molding: A Simple and Efficient Route to Improve Barrier Performance of Polymeric Materials. ACS Applied Materials & Interfaces, 2015, 7, 10178-10189.	4.0	34
48	A novel route towards tunable piezoresistive behavior in conductive polymer composites: Addition of insulating filler with different size and surface characteristics. Composites Part A: Applied Science and Manufacturing, 2017, 96, 99-109.	3.8	34
49	Extensionâ€induced mechanical reinforcement in meltâ€spun fibers of polyamide 66/multiwalled carbon nanotube composites. Polymer International, 2011, 60, 1646-1654.	1.6	30
50	â€œToolboxâ€•for the Processing of Functional Polymer Composites. Nano-Micro Letters, 2022, 14, 35.	14.4	30
51	Preparation, structure and properties of thermoplastic olefin nanocomposites containing functionalized carbon nanotubes. Polymer International, 2011, 60, 1629-1637.	1.6	29
52	Enhancement of Î²-nucleated crystallization in polypropylene random copolymer via adding isotactic polypropylene. Polymer, 2012, 53, 4861-4870.	1.8	29
53	Enhanced dielectric properties through using mixed fillers consisting of nano-barium titanate/nickel hydroxide for polyvinylidene fluoride based composites. Composites Part A: Applied Science and Manufacturing, 2018, 104, 24-31.	3.8	28
54	An environmentally friendly and fast approach to prepare reduced graphite oxide with water and organic solvents solubility. Colloids and Surfaces B: Biointerfaces, 2013, 101, 171-176.	2.5	27

#	Article	IF	Citations
55	High mechanical reinforcing efficiency of layered poly(vinyl alcohol) â€“ graphene oxide nanocomposites. Nanocomposites, 2015, 1, 89-95.	2.2	27
56	Synergistic Reinforcement of Highly Oriented Poly(propylene) Tapes by Sepiolite Nanoclay. Macromolecular Materials and Engineering, 2010, 295, 37-47.	1.7	24
57	Strengthening and toughening of thermoplastic polyolefin elastomer using polypropyleneâ€grafted multiwalled carbon nanotubes. Journal of Applied Polymer Science, 2011, 121, 2104-2112.	1.3	24
58	Dynamic percolation in highly oriented conductive networks formed with different carbon nanofillers. Colloid and Polymer Science, 2012, 290, 1393-1401.	1.0	24
59	Shear induced formation and destruction behavior of conductive networks in nickel/polyurethane composites during strain sensing. Composites Part A: Applied Science and Manufacturing, 2020, 130, 105757.	3.8	22
60	An unusual decrease in dielectric constant due to the addition of nickel hydroxide into silicone rubber. Composites Part B: Engineering, 2020, 193, 108006.	5.9	22
61	Multi-layered boron nitride/polyimide high-temperature capacitor dielectric film. Materials Today Energy, 2022, 29, 101093.	2.5	22
62	Flexible and Giant Terahertz Modulation Based on Ultra-Strain-Sensitive Conductive Polymer Composites. ACS Applied Materials & Interfaces, 2020, 12, 9790-9796.	4.0	21
63	The preparation of high performance Multi-functional porous sponge through a biomimic coating strategy based on polyurethane dendritic colloids. Chemical Engineering Journal, 2022, 438, 135659.	6.6	20
64	Fabricating high performance multi-functional hygroelectric generator through a biomimic approach. Nano Energy, 2022, 98, 107241.	8.2	20
65	Improving tensile strength and toughness of melt processed polyamide 6/multiwalled carbon nanotube composites by in situ polymerization and filler surface functionalization. Journal of Applied Polymer Science, 2011, 120, 133-140.	1.3	18
66	A novel interpenetrating segregated functional filler network structure for ultra-high electrical conductivity and efficient EMI shielding in CPCs containing carbon nanotubes. Materials Today Physics, 2021, 21, 100483.	2.9	18
67	Towards high-performance polypropylene and its random copolymer: Insight into toughening mechanism of supercritical carbon dioxide assisted annealing. Journal of Supercritical Fluids, 2014, 87, 83-92.	1.6	17
68	Oriented Poly(lactic acid)/Carbon Nanotube Composite Tapes with High Electrical Conductivity and Mechanical Properties. Macromolecular Materials and Engineering, 2015, 300, 1257-1267.	1.7	17
69	Morphology Evolution of Polymer Blends under Intense Shear During High Speed Thin-Wall Injection Molding. Journal of Physical Chemistry B, 2017, 121, 6257-6270.	1.2	17
70	The effect of DBP of carbon black on the dynamic self-assembly in a polymer melt. RSC Advances, 2016, 6, 24843-24852.	1.7	15
71	Recent Progress on the Confinement, Assembly, and Relaxation of Inorganic Functional Fillers in Polymer Matrix during Processing. Macromolecular Rapid Communications, 2017, 38, 1700444.	2.0	15
72	Composite Membrane of Poly(vinylidene fluoride) and 2D Ni(OH)₂ Nanosheets for High-Performance Lithium-Ion Battery. ACS Applied Polymer Materials, 2022, 4, 960-970.	2.0	15

#	Article	IF	Citations
73	High speed injection molding of high density polyethylene â€" Effects of injection speed on structure and properties. Chinese Journal of Polymer Science (English Edition), 2011, 29, 456-464.	2.0	14
74	A novel method to incorporate functional filler into TPSiV for balanced physical properties. Composites Science and Technology, 2021, 213, 108925.	3.8	14
75	Combined effect of Î²â€nucleating agent and processing melt temperature on the toughness of impact polypropylene copolymer. Polymer International, 2013, 62, 172-178.	1.6	13
76	Processing of Poly(propylene)/Carbon Nanotube Composites using scCO₂â€Assisted Mixing. Macromolecular Materials and Engineering, 2010, 295, 566-574.	1.7	12
77	Tailoring toughness of injection molded bar of polypropylene random copolymer through processing melt temperature. Polymer International, 2011, 60, 1705-1714.	1.6	11
78	Processing condition induced structural evolution in the alternating multi-layer structure during high speed thin-wall injection molding. Polymer, 2016, 99, 49-58.	1.8	11
79	Toward multi-functional polymer composites through selectively distributing functional fillers. Composites Part A: Applied Science and Manufacturing, 2016, 82, 20-33.	3.8	11
80	Morphology and mechanical properties of poly(ethyleneoctene) copolymers obtained by dynamic packing injection molding. Chinese Journal of Polymer Science (English Edition), 2012, 30, 603-612.	2.0	10
81	The influence of blend composition and filler on the microstructure, crystallization, and mechanical behavior of polymer blends with multilayered structures. Nanocomposites, 2018, 4, 178-189.	2.2	6
82	Superior reinforcement in polyamide 1010/multiwalled carbon nanotube composites realized by highâ€rate drawing and incorporation of compatibilizer. Polymer International, 2012, 61, 1400-1410.	1.6	4
83	Strain sensing conductive polymer composites: Sensitivity and stability. AIP Conference Proceedings, 2016, , .	0.3	4
84	Alternating multilayer structure of polyethylene/polypropylene blends obtained through injection molding. Journal of Applied Polymer Science, 2012, 124, 4452-4456.	1.3	3
85	Enhanced fracture energy during deformation through the construction of an alternating multilayered structure for polyolefin blends. Polymer International, 2018, 67, 1094-1102.	1.6	2
86	Balanced physical properties for thermoplastic silicone vulcanizateâ€based polymer composites containing functional filler. Polymer Composites, 2020, 41, 4307-4317.	2.3	2
87	The processing of alternating multi-layered functional polymer composites through high speed thin-wall injection molding. AIP Conference Proceedings, 2019, , .	0.3	0