

# Xia Dong

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Stretchable Self-Healing Plastic Polyurethane with Super-High Modulus by Local Phase-Lock Strategy. <i>Macromolecular Rapid Communications</i> , 2023, 44, .	2.0	7
2	Effect of carbon nanotubes on mechanical properties of polyamide 12 parts by fused filament fabrication. <i>Polymer</i> , 2022, 247, 124784.	1.8	8
3	Ultrathin, transparent, and robust self-healing electronic skins for tactile and non-contact sensing. <i>Nano Energy</i> , 2022, 95, 107056.	8.2	55
4	The shape effect and mechanism of <sc>particle-reinforced shear-thickening</sc> gel composites. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	5
5	2D-Planar decorated 3D-network enables strong synergistic mechanics and programmable shape transformations for alginate-based hydrogels. <i>Chemical Engineering Journal</i> , 2021, 405, 126619.	6.6	15
6	Dynamic Bonds Mediate H-H Interaction via Phase Locking Effect for Enhanced Heat Resistant Thermoplastic Polyurethane. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2021, 39, 154-163.	2.0	26
7	New insight into the <sc>thermal-oxidative</sc> stability of polyamide 6: A comparison investigation on the effect of hindered amine and <sc>Cu</sc>/<sc>Kl</sc>. <i>Polymer Engineering and Science</i> , 2021, 61, 348-361.	1.5	4
8	The toughening mechanism of core-shell particles by the interface interaction and crystalline transition in polyamide 1012. <i>Composites Part B: Engineering</i> , 2021, 206, 108539.	5.9	20
9	Correlation between welding behavior and mechanical anisotropy of long chain polyamide 12 manufactured with fused filament fabrication. <i>Polymer</i> , 2021, 213, 123318.	1.8	18
10	Microphase separation/crosslinking competition-based ternary microstructure evolution of poly(ether- <i>b</i> -amide). <i>RSC Advances</i> , 2021, 11, 6934-6942.	1.7	7
11	Strain-Induced Form Transition and Crystallization Behavior of the Transparent Polyamide. <i>Polymers</i> , 2021, 13, 1028.	2.0	3
12	Composition dependent miscibility in the crystalline state of polyamide 6 /polyamide 4,10 blends: From single to double crystalline blends. <i>Polymer</i> , 2021, 219, 123570.	1.8	12
13	Effect of crosslinking networks on strain-induced crystallization in polyamide 1012 multiblock Poly(tetramethylene oxide) copolymers. <i>Polymer</i> , 2021, 225, 123802.	1.8	10
14	Reversible-Irreversible Transition of Strain-Induced Crystallization in Segmented Copolymers: The Critical Strain and Chain Conformation. <i>ACS Applied Polymer Materials</i> , 2021, 3, 3576-3585.	2.0	15
15	Peculiar self-nucleation behavior of a polybutene-1/ethylene random copolymer. <i>Polymer Crystallization</i> , 2021, 4, e10201.	0.5	0
16	The Brill Transition in Long-Chain Aliphatic Polyamide 1012: The Role of Hydrogen-Bonding Organization. <i>Macromolecules</i> , 2021, 54, 6835-6844.	2.2	26
17	To Clarify the Resilience of PEBA/MWCNT Foams via Revealing the Effect of the Nanoparticle and the Cellular Structure. <i>ACS Applied Polymer Materials</i> , 2021, 3, 3766-3775.	2.0	19
18	Competition between Chain Extension and Crosslinking in Polyamide 1012 during High-Temperature Thermal Treatments as Revealed by Successive Self-Nucleation and Annealing Fractionation. <i>Macromolecules</i> , 2021, 54, 7552-7563.	2.2	15

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19	Arbitrarily Reconfigurable and Thermadapable Reversible Two-Way Shape Memory Poly(thiourethane) Accomplished by Multiple Dynamic Covalent Bonds. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 43426-43437.	4.0	22
20	Crystallization of a Self-Assembling Nucleator in Poly( <i>l</i> -lactide) Melt. <i>Crystal Growth and Design</i> , 2021, 21, 5880-5888.	1.4	9
21	The origin of memory effects in the crystallization of polyamides: Role of hydrogen bonding. <i>Polymer</i> , 2020, 188, 122117.	1.8	61
22	The segmental responses to orientation and relaxation of thermoplastic poly(ether-ester) elastomer during cyclic deformation: An in-situ WAXD/SAXS study. <i>Polymer</i> , 2020, 188, 122120.	1.8	19
23	A Facile Strategy to Fabricate Antistatic Polyamide 1012/Multi-Walled Carbon Nanotube Pipes for Fuel Delivery Applications. <i>Polymers</i> , 2020, 12, 1797.	2.0	3
24	Cell Structure Variation in Poly(ether- <i>mb</i> -amide) Copolymer Foams Induced by Chemi-Crystallization. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 11340-11349.	1.8	30
25	Time and Temperature Dependence of the Structural Evolution for Polyamide 1012. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2020, 38, 993-998.	2.0	11
26	Effect of nanoparticle and glass fiber on the hydrothermal aging of polyamide 6. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49585.	1.3	7
27	Influence of soft block and film thickness on confined morphology of poly(ether- <i>mb</i> -amide) multiblock copolymers. <i>Polymer Crystallization</i> , 2020, 3, e10100.	0.5	2
28	Exploring the polymorphic behavior of a $\beta$ -nucleated propylene-ethylene random copolymer under shear flow. <i>Polymer Crystallization</i> , 2020, 3, e10105.	0.5	0
29	The methylene infrared vibration and dielectric behavior monitored by amide group arrangement for long chain polyamides. <i>Polymer</i> , 2020, 190, 122231.	1.8	25
30	Cover image: Influence of soft block and film thickness on confined morphology of poly(ether- <i>mb</i> -amide) multiblock copolymers. <i>Polymer Crystallization</i> , 2020, 3, e10100.	0.5	2
31	Nucleation of Poly(lactide) on the Surface of Different Fibers. <i>Macromolecules</i> , 2019, 52, 6274-6284.	2.2	35
32	Cooking-Inspired Versatile Design of an Ultrastrong and Tough Polysaccharide Hydrogel through Programmed Supramolecular Interactions. <i>Advanced Materials</i> , 2019, 31, e1902381.	11.1	79
33	Verification of the Competitive Effect between Heterogeneous and Gas Diffusion-Induced Cell Nucleation in Determining the Cell Structure in Polystyrene/Poly(methyl methacrylate) Blends via Structural Evolution Driven by Phase Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 18439-18447.	1.8	10
34	Fused deposition modeling with polyamide 1012. <i>Rapid Prototyping Journal</i> , 2019, 25, 1145-1154.	1.6	28
35	Combined graphene and poly (butylene terephthalate)-block-poly (tetramethylene glycol) enhance the mechanical performance of polyamide-6. <i>European Polymer Journal</i> , 2019, 110, 97-106.	2.6	10
36	Morphology and electric conductivity controlling of <i>in situ</i> polymerized poly(decamethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.3	3

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37	The effects of carbon materials with different dimensionalities on the flow instabilities of LLDPE (linear low density polyethylene). <i>Polymer</i> , 2018, 142, 144-154.	1.8	7
38	Microstructural evolution underlying the ternary stages of the elastic behaviors for poly(ether- <i>b</i> -amide) copolymer elastomers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2018, 56, 855-864.	2.4	17
39	Reversible Lamellar Periodic Structures Induced by Sequential Crystallization/Melting in PBS- <i>co</i> -PCL Multiblock Copolymer. <i>Macromolecules</i> , 2018, 51, 1100-1109.	2.2	27
40	Interfacial nucleation in iPP/PB-1 blends promotes the formation of polybutene-1 trigonal crystals. <i>Polymer</i> , 2018, 138, 396-406.	1.8	43
41	Rheological Behaviors of Polypropylene/Poly(1-butene) Blends. <i>Journal of Macromolecular Science - Physics</i> , 2018, 57, 608-623.	0.4	3
42	Influence of soft block crystallization on microstructural variation of double crystalline poly(ether- <i>b</i> -Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.5	14
43	Morphology evolution and dynamic relaxation behavior of solution-polymerized styrene-butadiene rubber/polyisoprene/silica ternary composites influenced by shear. <i>Polymer</i> , 2018, 145, 416-425.	1.8	5
44	Promotion of Self-Nucleation with Latent Form I Nuclei in Polybutene-1 and Its Copolymer. <i>Macromolecules</i> , 2018, 51, 6037-6046.	2.2	40
45	Colorless, Transparent, Robust, and Fast Scratch- <i>Self</i> -Healing Elastomers via a Phase- <i>Locked</i> Dynamic Bonds Design. <i>Advanced Materials</i> , 2018, 30, e1802556.	11.1	448
46	Surface modification of polyimide fibers by novel alkaline- <i>solvent</i> hydrolysis to form high- <i>performance</i> fiber- <i>reinforced</i> composites. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46595.	1.3	8
47	Shape memory property and underlying mechanism by the phase separation control of poly( $\mu$ - <i>caprolactone</i> )/poly(ether- <i>b</i> -amide). <i>Polymer International</i> , 2018, 67, 1291-1301.	1.6	3
48	High elasticity and corresponding microstructure origin of novel long chain poly(amide-block-ether) filament fibers. <i>European Polymer Journal</i> , 2017, 90, 171-182.	2.6	31
49	Facile synthesis of tunable core-shell particles via one-step copolymerization. <i>Colloid and Polymer Science</i> , 2017, 295, 613-617.	1.0	2
50	Self-Associated Polyamide Alloys with Tailored Polymorphism Transition and Lamellar Thickening for Advanced Mechanical Application. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19238-19247.	4.0	18
51	Strain-Induced Crystallization of Segmented Copolymers: Deviation from the Classic Deformation Mechanism. <i>Macromolecules</i> , 2017, 50, 3911-3921.	2.2	61
52	Tensile modulus enhancement and mechanism of polyimide fibers by post-thermal treatment induced microvoid evolution. <i>European Polymer Journal</i> , 2017, 91, 232-241.	2.6	18
53	The Brill transition in polyether- <i>b</i> -amide segmented copolymers and composition dependence. <i>European Polymer Journal</i> , 2017, 93, 334-346.	2.6	24
54	The effect of microstructural evolution during deformation on the post-yielding behavior of self-associated polyamide blends. <i>Polymer</i> , 2017, 117, 231-242.	1.8	20

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55	A simplified chemorheological model of viscosity evolution for solvent containing resol resin in <sc>RTM</sc> process. Journal of Applied Polymer Science, 2017, 134, 45282.	1.3	9
56	Probing into the epitaxial crystallization of $\beta^2$ form isotactic polypropylene: From experimental observations to molecular mechanics computation. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 418-424.	2.4	16
57	Double Crystalline Multiblock Copolymers with Controlling Microstructure for High Shape Memory Fixity and Recovery. ACS Applied Materials & Interfaces, 2017, 9, 30046-30055.	4.0	35
58	Correlation between stress relaxation dynamics and thermochemistry for covalent adaptive networks polymers. Materials Chemistry Frontiers, 2017, 1, 111-118.	3.2	77
59	High performance long chain polyamide/calcium silicate whisker nanocomposites and the effective reinforcement mechanism. Chinese Journal of Polymer Science (English Edition), 2016, 34, 991-1000.	2.0	28
60	Polymerization induced viscoelastic phase separation of porous phenolic resin from solution. Polymer International, 2016, 65, 1031-1038.	1.6	8
61	Simultaneous improvement in strength, toughness, and thermal stability of epoxy/halloysite nanotubes composites by interfacial modification. Journal of Applied Polymer Science, 2016, 133, .	1.3	23
62	The formation of the <sc>S</sc>-shaped edge-on lamellae on the thin porous polylactic acid membrane via phase separation induced by water microdroplets. Journal of Applied Polymer Science, 2016, 133, .	1.3	5
63	Effect of solubility of a hydrazide compound on the crystallization behavior of poly(<sc>L</sc>-lactide). RSC Advances, 2016, 6, 113377-113389.	1.7	12
64	Design and structural study of a triple-shape memory PCL/PVC blend. Polymer, 2016, 104, 115-122.	1.8	40
65	A Multiscale Investigation on the Mechanism of Shape Recovery for IPDI to PPDI Hard Segment Substitution in Polyurethane. Macromolecules, 2016, 49, 5931-5944.	2.2	92
66	Entrance pressure instability of LLDPE and its composites. RSC Advances, 2016, 6, 81703-81711.	1.7	7
67	Synthesis and shape memory property of segmented poly(ester urethane) with poly(butylene) Tj ETQq1 1 0.784314,rgBT /Overlock 10	1.7	7
68	Enhancement of Mechanical and Self-Healing Performance in Multiwall Carbon Nanotube/Rubber Composites via Diels-Alder Bonding. Macromolecular Materials and Engineering, 2016, 301, 535-541.	1.7	85
69	Transient microstructure in long alkane segment polyamide: Deformation mechanism and its temperature dependence. Polymer, 2016, 97, 217-225.	1.8	47
70	Linear viscoelastic behaviors of polybutene-1 melts with various structure parameters. Chinese Journal of Polymer Science (English Edition), 2016, 34, 174-184.	2.0	7
71	Triple-shape memory epoxy based on Diels-Alder adduct molecular switch. Polymer, 2016, 84, 1-9.	1.8	83
72	Characterization on the phase separation behavior of styrene-butadiene rubber/polyisoprene/organoclay ternary blends under oscillatory shear. Journal of Chemical Physics, 2015, 143, 114903.	1.2	4

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73	Enhanced Crystallization Rate of Poly(L-lactide) Mediated by a Hydrazide Compound: Nucleating Mechanism Study. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1134-1145.	1.1	48
74	Facile fabrication of fast recyclable and multiple self-healing epoxy materials through diels-alder adduct cross-linker. <i>Journal of Polymer Science Part A</i> , 2015, 53, 2094-2103.	2.5	138
75	Phase morphology, crystallization behavior and mechanical properties of poly(L-lactide) toughened with biodegradable polyurethane: Effect of composition and hard segment ratio. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2015, 33, 1294-1304.	2.0	18
76	Transamidation determination and mechanism of long chain-based aliphatic polyamide alloys with excellent interface miscibility. <i>Polymer</i> , 2015, 59, 16-25.	1.8	28
77	Flow-induced crystallization of long chain aliphatic polyamides under a complex flow field: Inverted anisotropic structure and formation mechanism. <i>Polymer</i> , 2015, 73, 91-101.	1.8	20
78	Synergistic effect of nanofiller geometry and shear flow on the morphology evolution in SSBR/LPI/filler ternary system. <i>Polymer</i> , 2015, 72, 193-201.	1.8	4
79	Effective activation of halloysite nanotubes by piranha solution for amine modification via silane coupling chemistry. <i>RSC Advances</i> , 2015, 5, 52916-52925.	1.7	102
80	Superior shape memory properties and microstructure evolution of poly(ether-b-amide12) elastomer enhanced by poly( $\mu$ -caprolactone). <i>RSC Advances</i> , 2015, 5, 50628-50637.	1.7	16
81	Tailoring crystallization behavior of poly (L-lactide) with a low molecular weight aliphatic amide. <i>Colloid and Polymer Science</i> , 2015, 293, 3573-3583.	1.0	26
82	Tailored Porphyrin Assembly at the Oil-Aqueous Interface Based on the Receding of Three-Phase Contact Line of Droplet Template. <i>Advanced Materials Interfaces</i> , 2015, 2, 1400365.	1.9	17
83	Effect of Silane Coupling Agent on Physical Properties of Polypropylene Membrane Reinforced by Native Superfine down Powder. <i>Polymers and Polymer Composites</i> , 2014, 22, 509-518.	1.0	4
84	Rheological properties of polybutadiene/polyisoprene blend in the unstable and metastable regions under oscillatory shear. <i>Polymer</i> , 2014, 55, 2744-2750.	1.8	11
85	Two-way shape memory property and its structural origin of cross-linked poly( $\mu$ -caprolactone). <i>RSC Advances</i> , 2014, 4, 55483-55494.	1.7	56
86	Bio-based shape memory polyurethanes (Bio-SMPUs) with short side chains in the soft segment. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11490.	5.2	65
87	Formation, morphology and control of high-performance biomedical polyurethane porous membranes by water micro-droplet induced phase inversion. <i>Polymer</i> , 2014, 55, 5500-5508.	1.8	21
88	Probing the structure evolution/orientation induced by interaction between polyurethane segments and SiO <sub>2</sub> surface in shape memory process. <i>Polymer</i> , 2014, 55, 4289-4298.	1.8	24
89	Phase behavior actuating morphology and rheological response of polybutadiene/polyisoprene blends under small amplitude oscillatory shear. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2014, 32, 718-730.	2.0	7
90	Morphology and performance control of PLLA-based porous membranes by phase separation. <i>Polymer</i> , 2013, 54, 5965-5973.	1.8	54

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91	Morphology and mechanism of transcrystallization induced by fracture stress in the solution casted polystyrene/poly(ethylene oxide) blends films. <i>Polymer</i> , 2013, 54, 2606-2610.	1.8	0
92	Morphology evolution and rheological properties of polybutadiene/polyisoprene blend after the cessation of steady shear. <i>Journal of Chemical Physics</i> , 2013, 139, 114904.	1.2	9
93	Shear Induced Phase Boundary Shift in the Critical and Off-Critical Regions for a Polybutadiene/Polyisoprene Blend. <i>Macromolecules</i> , 2012, 45, 1692-1700.	2.2	32
94	Morphological and rheological responses to the transient and steady shear flow for a phase-separated polybutadiene/polyisoprene blend. <i>Polymer</i> , 2012, 53, 4818-4826.	1.8	17
95	Low-molecular weight aliphatic amides as nucleating agents for poly (L-lactic acid): Conformation variation induced crystallization enhancement. <i>Polymer</i> , 2012, 53, 2306-2314.	1.8	72
96	Phase separation induced morphology evolution and corresponding impact fracture behavior of iPP/PEOC blends. <i>Journal of Applied Polymer Science</i> , 2011, 121, 445-453.	1.3	11
97	Anomalous rheological behavior of poly(1-vinyl-2-pyrrolidone) and $\text{CuCl}_2$ in solution and their interactions in solid composites. <i>Polymer International</i> , 2009, 58, 906-911.	1.6	13
98	Nucleation/Growth in the Metastable and Unstable Phase Separation Regions under Oscillatory Shear Flow for an Off-critical Polymer Blend. <i>Macromolecules</i> , 2009, 42, 2873-2876.	2.2	18
99	Self-Similar Growth of Polyolefin Alloy Particles in a Single Granule Multi-Catalyst Reactor. <i>Advanced Materials</i> , 2008, 20, 2914-2917.	11.1	27
100	Structural and thermal stabilization of isotactic polypropylene/organo-montmorillonite/poly(ethylene-co-octene) nanocomposites by an elastomer component. <i>Polymer</i> , 2008, 49, 588-598.	1.8	34
101	Interplay between crystallization behaviors and extensional deformation of isotactic polypropylene and its blend with poly(ethylene-co-octene). <i>Polymer</i> , 2008, 49, 2568-2577.	1.8	30
102	Phase Separation Mechanism of Polybutadiene/Polyisoprene Blends under Oscillatory Shear Flow. <i>Macromolecules</i> , 2008, 41, 6818-6829.	2.2	59
103	Nascent Phase Separation and Crystallization Kinetics of an iPP/PEOC Polymer Alloy Prepared on a Single Multicatalyst Reactor Granule. <i>Macromolecules</i> , 2008, 41, 1421-1429.	2.2	34
104	Time evolution of phase structure and corresponding mechanical properties of iPP/PEOC blends in the late-stage phase separation and crystallization. <i>Polymer</i> , 2007, 48, 6395-6403.	1.8	34
105	Three-dimensional observation of the phase structure of high density polyethylene (HDPE)/poly(ethylene-co-butene) (PEB) blend by laser scanning confocal microscopy. <i>Science Bulletin</i> , 2007, 52, 2042-2047.	1.7	3
106	Shear-Induced Crystallization in a Blend of Isotactic Poly(propylene) and Poly(ethylene-co-octene). <i>Macromolecular Rapid Communications</i> , 2006, 27, 1677-1683.	2.0	40
107	Shear-Controlled Micro/Nanometer-Scaled Super-Hydrophobic Surfaces with Tunable Sliding Angles from Single Component Isotactic Poly(propylene). <i>Macromolecular Rapid Communications</i> , 2006, 27, 1627-1631.	2.0	31
108	Back Cover: <i>Macromol. Rapid Commun.</i> 19/2006. <i>Macromolecular Rapid Communications</i> , 2006, 27, 1708-1708.	2.0	0

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109	Conformational variation and crystalline phase transformation of low syndiotactic polypropylene films in stretched and stress-relaxed states. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 2924-2936.	2.4	6
110	Morphology investigation of transcristallinity at polyamide 66/aramid fiber interface. <i>Journal of Applied Polymer Science</i> , 2004, 91, 2980-2983.	1.3	13
111	Polypropylene/montmorillonite composites and their application in hybrid fiber preparation by melt-spinning. <i>Journal of Applied Polymer Science</i> , 2004, 92, 552-558.	1.3	52