

Thomas Thurn-Albrecht

List of Publications by Year in descending order

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59
papers

2,863
citations

218381

26
h-index

168136

53
g-index

61
all docs

61
docs citations

61
times ranked

3500
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Competition between crystal growth and intracrystalline chain diffusion determines the lamellar thickness in semicrystalline polymers. <i>Nature Communications</i> , 2022, 13, 119. | 5.8 | 26 |
| 2 | Bulk Enthalpy of Melting of Poly(L-lactic acid) (PLLA) Determined by Fast Scanning Chip Calorimetry. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2200148. | 2.0 | 16 |
| 3 | Digitally Tuned Multidirectional All-Polyethylene Composites via Controlled 1D Nanostructure Formation during Extrusion-Based 3D Printing. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1675-1686. | 2.0 | 11 |
| 4 | Dynamics and healing behavior of metallosupramolecular polymers. <i>Science Advances</i> , 2021, 7, . | 4.7 | 25 |
| 5 | Elucidating the Effect of Interfacial Interactions on Crystal Orientations in Thin Films of Polythiophenes. <i>Macromolecules</i> , 2021, 54, 5429-5439. | 2.2 | 13 |
| 6 | Heterogeneous Crystal Nucleation from the Melt in Polyethylene Oxide Droplets on Graphite: Kinetics and Microscopic Structure. <i>Crystals</i> , 2021, 11, 924. | 1.0 | 7 |
| 7 | Asymmetric Co-unit Inclusion in Statistical Copolyesters. <i>Macromolecules</i> , 2021, 54, 835-845. | 2.2 | 9 |
| 8 | Independent Variation of Transition Temperature and Prefrozen Layer Thickness at the Prefreezing Transition. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26184-26192. | 1.5 | 9 |
| 9 | Influence of 1%-Bromo Substitution on Structure and Optoelectronic Properties of Homopolymers and Gradient Copolymers of 3-Hexylthiophene. <i>Macromolecules</i> , 2020, 53, 2474-2484. | 2.2 | 5 |
| 10 | Structure-Property Relationships of Microphase-Separated Metallosupramolecular Polymers. <i>Macromolecules</i> , 2020, 53, 5068-5084. | 2.2 | 25 |
| 11 | Intracrystalline Dynamics in Oligomer-Diluted Poly(Ethylene Oxide). <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 1900393. | 1.1 | 3 |
| 12 | The Key Role of Side Chain Linkage in Structure Formation and Mixed Conduction of Ethylene Glycol Substituted Polythiophenes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13029-13039. | 4.0 | 78 |
| 13 | Hierarchical structure of polybutene-1 in crystal blocks resulting from the form II to I solid-to-solid transition as revealed by small-angle X-ray scattering. <i>Polymer</i> , 2020, 195, 122425. | 1.8 | 22 |
| 14 | The effect of intracrystalline chain dynamics on melting and reorganization during heating in semicrystalline polymers. <i>Polymer</i> , 2020, 196, 122441. | 1.8 | 21 |
| 15 | Phenomenological Theory of First-Order Prefreezing. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1942-1946. | 2.1 | 21 |
| 16 | Effect of Substrate Interaction on Thermodynamics of Prefreezing. <i>Macromolecules</i> , 2019, 52, 9140-9148. | 2.2 | 17 |
| 17 | Regioregular Polymer Analogous Thionation of Naphthalene Diimide-Bithiophene Copolymers. <i>Macromolecules</i> , 2018, 51, 984-991. | 2.2 | 13 |
| 18 | Interface-Induced Crystallization of Polycaprolactone on Graphite via First-Order Prewetting of the Crystalline Phase. <i>Macromolecules</i> , 2018, 51, 189-194. | 2.2 | 31 |

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|----|---|-----|-----------|
| 19 | The Underestimated Effect of Intracrystalline Chain Dynamics on the Morphology and Stability of Semicrystalline Polymers. <i>Macromolecules</i> , 2018, 51, 8377-8385. | 2.2 | 36 |
| 20 | Modular Synthesis and Structure Analysis of P3HT- <i>b</i> -PPBI Donor- <i>b</i> -Acceptor Diblock Copolymers. <i>Macromolecules</i> , 2018, 51, 7044-7051. | 2.2 | 18 |
| 21 | Interplay between Crystallization and Entanglements in the Amorphous Phase of the Crystal-Fixed Polymer Poly(μ -caprolactone). <i>Macromolecules</i> , 2018, 51, 5831-5841. | 2.2 | 44 |
| 22 | Molecular Order in Cold Drawn, Strain-Recrystallized Poly(μ -caprolactone). <i>Macromolecules</i> , 2017, 50, 1056-1065. | 2.2 | 5 |
| 23 | Surface induced orientation and vertically layered morphology in thin films of poly(3-hexylthiophene) crystallized from the melt. <i>Journal of Materials Research</i> , 2017, 32, 1957-1968. | 1.2 | 22 |
| 24 | Intracrystalline Jump Motion in Poly(ethylene oxide) Lamellae of Variable Thickness: A Comparison of NMR Methods. <i>Macromolecules</i> , 2017, 50, 3890-3902. | 2.2 | 28 |
| 25 | What Controls the Structure and the Linear and Nonlinear Rheological Properties of Dense, Dynamic Supramolecular Polymer Networks?. <i>Macromolecules</i> , 2017, 50, 2973-2985. | 2.2 | 77 |
| 26 | Clarifying the Origin of Multiple Melting of Segmented Thermoplastic Polyurethanes by Fast Scanning Calorimetry. <i>Macromolecules</i> , 2017, 50, 7672-7680. | 2.2 | 42 |
| 27 | Semicrystalline Block Copolymers in Rigid Confining Nanopores. <i>Macromolecules</i> , 2017, 50, 8637-8646. | 2.2 | 13 |
| 28 | Opposing Phase- <i>Segregation</i> and Hydrogen- <i>Bonding</i> Forces in Supramolecular Polymers. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13016-13020. | 7.2 | 27 |
| 29 | Opposing Phase- <i>Segregation</i> and Hydrogen- <i>Bonding</i> Forces in Supramolecular Polymers. <i>Angewandte Chemie</i> , 2017, 129, 13196-13200. | 1.6 | 4 |
| 30 | Manipulating Semicrystalline Polymers in Confinement. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7723-7728. | 1.2 | 8 |
| 31 | Temperature-dependent IR-transition moment orientational analysis applied to thin supported films of poly- μ -caprolactone. <i>Soft Matter</i> , 2017, 13, 9211-9219. | 1.2 | 7 |
| 32 | Crystallinity of poly(3-hexylthiophene) in thin films determined by fast scanning calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1791-1801. | 2.4 | 22 |
| 33 | Interface and Confinement Induced Order and Orientation in Thin Films of Poly(μ -caprolactone). <i>Macromolecules</i> , 2016, 49, 3442-3451. | 2.2 | 13 |
| 34 | Crystallization of Poly(ethylene oxide) with a Well-Defined Point Defect in the Middle of the Polymer Chain. <i>Macromolecules</i> , 2016, 49, 6609-6620. | 2.2 | 39 |
| 35 | Unveiling the molecular mechanism of self-healing in a telechelic, supramolecular polymer network. <i>Scientific Reports</i> , 2016, 6, 32356. | 1.6 | 67 |
| 36 | Influence of Fullerene Grafting Density on Structure, Dynamics, and Charge Transport in P3HT- <i>b</i> -PPC ₆₁ BM Block Copolymers. <i>Macromolecules</i> , 2016, 49, 1637-1647. | 2.2 | 27 |

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|----|---|------|-----------|
| 37 | Basic principles of static proton low-resolution spin diffusion NMR in nanophase-separated materials with mobility contrast. <i>Solid State Nuclear Magnetic Resonance</i> , 2015, 72, 50-63. | 1.5 | 80 |
| 38 | Donor-acceptor block copolymers carrying pendant PC ₇₁ BM fullerenes with an ordered nanoscale morphology. <i>Polymer Chemistry</i> , 2015, 6, 813-826. | 1.9 | 21 |
| 39 | Direct observation of prefreezing at the interface melt-solid in polymer crystallization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17368-17372. | 3.3 | 39 |
| 40 | Nanostructure and Rheology of Hydrogen-Bonding Telechelic Polymers in the Melt: From Micellar Liquids and Solids to Supramolecular Gels. <i>Macromolecules</i> , 2014, 47, 2122-2130. | 2.2 | 83 |
| 41 | NMR study of interphase structure in layered polymer morphologies with mobility contrast: disorder and confinement effects vs. dynamic heterogeneities. <i>Colloid and Polymer Science</i> , 2014, 292, 1825-1839. | 1.0 | 22 |
| 42 | Determination of the Crystallinity of Semicrystalline Poly(3-hexylthiophene) by Means of Wide-Angle X-ray Scattering. <i>Macromolecules</i> , 2013, 46, 9642-9651. | 2.2 | 66 |
| 43 | Formation, morphology and internal structure of one-dimensional nanostructures of the ferroelectric polymer P(VDF-TrFE). <i>Polymer</i> , 2013, 54, 2737-2744. | 1.8 | 35 |
| 44 | Twin Polymerization at Spherical Hard Templates: An Approach to Size-Adjustable Carbon Hollow Spheres with Micro- or Mesoporous Shells. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6088-6091. | 7.2 | 123 |
| 45 | Phase Separation in the Melt and Confined Crystallization as the Key to Well-Ordered Microphase Separated Donor-Acceptor Block Copolymers. <i>Macromolecules</i> , 2013, 46, 4403-4410. | 2.2 | 57 |
| 46 | Correlation of charge transport with structural order in highly ordered melt-crystallized poly(3-hexylthiophene) thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 943-951. | 2.4 | 89 |
| 47 | The Controlled Synthesis of Carbon Tubes and Rods by Template-Assisted Twin Polymerization. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-8. | 1.0 | 7 |
| 48 | Comb-shaped polymers to enhance hydroxide transport in anion exchange membranes. <i>Energy and Environmental Science</i> , 2012, 5, 7888. | 15.6 | 317 |
| 49 | Investigation of the different stable states of the cantilever oscillation in an atomic force microscope. <i>Nanotechnology</i> , 2012, 23, 245702. | 1.3 | 8 |
| 50 | Influence of Chain Topology on Polymer Dynamics and Crystallization. Investigation of Linear and Cyclic Poly(μ -caprolactone)s by ¹ H Solid-State NMR Methods. <i>Macromolecules</i> , 2011, 44, 2743-2754. | 2.2 | 77 |
| 51 | Poly(μ -caprolactone)- <i>poly</i> (isobutylene): A crystallizing, hydrogen-bonded pseudo-block copolymer. <i>Journal of Polymer Science Part A</i> , 2011, 49, 3404-3416. | 2.5 | 27 |
| 52 | Fiber and Tube Formation by Melt Infiltration of Block Copolymers into Al ₂ O ₃ Pores. <i>Macromolecular Symposia</i> , 2010, 293, 58-62. | 0.4 | 2 |
| 53 | Aggregation and Chain Dynamics in Supramolecular Polymers by Dynamic Rheology: Cluster Formation and Self-Aggregation. <i>Macromolecules</i> , 2010, 43, 10006-10016. | 2.2 | 150 |
| 54 | High Crystallinity and Nature of Crystal-Crystal Phase Transformations in Regioregular Poly(3-hexylthiophene). <i>Macromolecules</i> , 2010, 43, 9401-9410. | 2.2 | 126 |

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|----|---|-----|-----------|
| 55 | Temperature and Molecular Weight Dependent Hierarchical Equilibrium Structures in Semiconducting Poly(3-hexylthiophene). <i>Macromolecules</i> , 2010, 43, 4646-4653. | 2.2 | 207 |
| 56 | Anisotropic domain orientation and local, reversible polarisation switching in textured ferroelectric polymer nanofibers. , 2008, , . | | 0 |
| 57 | Coherent Kinetic Control over Crystal Orientation in Macroscopic Ensembles of Polymer Nanorods and Nanotubes. <i>Physical Review Letters</i> , 2006, 97, 027801. | 2.9 | 197 |
| 58 | Thermodynamics of Formation, Reorganization, and Melting of Confined Nanometer-Sized Polymer Crystals. <i>Macromolecules</i> , 2003, 36, 1257-1260. | 2.2 | 83 |
| 59 | Direct Visualization of Random Crystallization and Melting in Arrays of Nanometer-Size Polymer Crystals. <i>Physical Review Letters</i> , 2001, 87, 226101. | 2.9 | 187 |