

# Dominique Hourdet

## List of Publications by Year in descending order

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75  
papers

3,843  
citations

126907

33  
h-index

123424

61  
g-index

77  
all docs

77  
docs citations

77  
times ranked

4132  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Supramolecular Hydrogels with Tunable Swelling by Host Complexation with Cyclobis(paraquat- <i>p</i> -phenylene). <i>Macromolecules</i> , 2021, 54, 1926-1933.  | 4.8  | 4         |
| 2  | Molecular mechanism of abnormally large nonsoftening deformation in a tough hydrogel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .                     | 7.1  | 21        |
| 3  | Stimuli-Responsive Toughening of Hydrogels. <i>Chemistry of Materials</i> , 2021, 33, 7633-7656.  | 6.7  | 68        |
| 4  | Hydrophilicity-Hydrophobicity Transformation, Thermo-responsive Morphomechanics, and Crack Multifurcation Revealed by AIEgens in Mechanically Strong Hydrogels. <i>Advanced Materials</i> , 2021, 33, e2101500. | 21.0 | 46        |
| 5  | Dual Responsive Regulation of Host-Guest Complexation in Aqueous Media to Control Partial Release of the Host. <i>Chemistry - A European Journal</i> , 2020, 26, 1292-1297.                                     | 3.3  | 8         |
| 6  | Topology-Specific Injectable Sticky Hydrogels. <i>Macromolecules</i> , 2020, 53, 9779-9792.   | 4.8  | 12        |
| 7  | Coacervate-Based Underwater Adhesives in Physiological Conditions. <i>ACS Applied Polymer Materials</i> , 2020, 2, 3397-3410.   | 4.4  | 21        |
| 8  | Responsive Adsorption of N-Isopropylacrylamide Based Copolymers on Polymer Brushes. <i>Polymers</i> , 2020, 12, 153.  | 4.5  | 12        |
| 9  | Hybrid Complex Coacervate. <i>Polymers</i> , 2020, 12, 320.   | 4.5  | 8         |
| 10 | Tuning the Interactions in Multiresponsive Complex Coacervate-Based Underwater Adhesives. <i>International Journal of Molecular Sciences</i> , 2020, 21, 100.   | 4.1  | 14        |
| 11 | Underwater Adhesion of Multiresponsive Complex Coacervates. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901785.  | 3.7  | 40        |
| 12 | Complex Coacervation: Underwater Adhesion of Multiresponsive Complex Coacervates ( <i>Adv. Mater.</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 3.7   | 3.7  | 0         |
| 13 | Thermally Triggered Injectable Underwater Adhesives. <i>Macromolecular Rapid Communications</i> , 2020, 41, e1900653.   | 3.9  | 16        |
| 14 | Enhancement of the Adhesive Properties by Optimizing the Water Content in PNIPAM-Functionalized Complex Coacervates. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1722-1730.                                 | 4.4  | 23        |
| 15 | Relaxation Dynamics and Underlying Mechanism of a Thermally Reversible Gel from Symmetric Triblock Copolymer. <i>Macromolecules</i> , 2019, 52, 8651-8661.  | 4.8  | 12        |
| 16 | Effect of responsive graft length on mechanical toughening and transparency in microphase-separated hydrogels. <i>Soft Matter</i> , 2019, 15, 8653-8666.  | 2.7  | 8         |
| 17 | Hydrophobic Hydrogels: Hydrophobic Hydrogels with Fruit-Like Structure and Functions ( <i>Adv. Mater.</i> ) Tj ETQq1 1,0,784314,rgBT /Overlock 10 Tf 21.0 3   | 21.0 | 3         |
| 18 | Hydrophobic Hydrogels with Fruit-Like Structure and Functions. <i>Advanced Materials</i> , 2019, 31, e1900702.  | 21.0 | 64        |

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|----|---|------|-----------|
| 19 | From Molecular Electrostatic Interactions and Hydrogel Architecture to Macroscopic Underwater Adherence. <i>Macromolecules</i> , 2019, 52, 3852-3862.   | 4.8  | 13        |
| 20 | Thermoresponsive Complex Coacervate-Based Underwater Adhesive. <i>Advanced Materials</i> , 2019, 31, e1808179.  | 21.0 | 137       |
| 21 | Cold and Hot Gelling of Alginate-graft-PNIPAM: a Schizophrenic Behavior Induced by Potassium Salts. <i>Biomacromolecules</i> , 2018, 19, 576-587.   | 5.4  | 22        |
| 22 | Equilibrium and Out-of-Equilibrium Adherence of Hydrogels against Polymer Brushes. <i>Macromolecules</i> , 2018, 51, 7556-7566.   | 4.8  | 18        |
| 23 | Hydrogels with Dual Thermoresponsive Mechanical Performance. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700287.  | 3.9  | 24        |
| 24 | Supramolecular polymer hydrogels induced by host-guest interactions with di-[cyclobis(paraquat-p-phenylene)] cross-linkers: from molecular complexation to viscoelastic properties. <i>Soft Matter</i> , 2017, 13, 5269-5282. | 2.7  | 10        |
| 25 | Thermoresponsive Toughening with Crack Bifurcation in Phase-Separated Hydrogels under Isochoric Conditions. <i>Advanced Materials</i> , 2016, 28, 5857-5864.  | 21.0 | 91        |
| 26 | Thermoresponsive Toughening in LCST-Type Hydrogels: Comparison between Semi-Interpenetrated and Grafted Networks. <i>Macromolecules</i> , 2016, 49, 9568-9577.  | 4.8  | 36        |
| 27 | Thermoresponsive Toughening in LCST-Type Hydrogels with Opposite Topology: From Structure to Fracture Properties. <i>Macromolecules</i> , 2016, 49, 4295-4306.  | 4.8  | 49        |
| 28 | Recognition-Mediated Hydrogel Swelling Controlled by Interaction with a Negative Thermoresponsive LCST Polymer. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13974-13978.                                     | 13.8 | 34        |
| 29 | Influence of topology of LCST-based graft copolymers on responsive assembling in aqueous media. <i>Polymer</i> , 2015, 60, 164-175.   | 3.8  | 43        |
| 30 | Structure investigation of nanohybrid PDMA/silica hydrogels at rest and under uniaxial deformation. <i>Soft Matter</i> , 2015, 11, 5905-5917.   | 2.7  | 21        |
| 31 | Synthesis and characterization of PEPO grafted carboxymethyl guar and carboxymethyl tamarind as new thermo-associating polymers. <i>Carbohydrate Polymers</i> , 2015, 117, 331-338.   | 10.2 | 40        |
| 32 | Nanoparticle solutions as adhesives for gels and biological tissues. <i>Nature</i> , 2014, 505, 382-385.  | 27.8 | 642       |
| 33 | Design and Viscoelastic Properties of PDMA/Silica Assemblies in Aqueous Media. <i>Macromolecular Symposia</i> , 2014, 337, 58-73.   | 0.7  | 6         |
| 34 | Probing pH-Responsive Interactions between Polymer Brushes and Hydrogels by Neutron Reflectivity. <i>Langmuir</i> , 2014, 30, 9700-9706.  | 3.5  | 8         |
| 35 | Dynamics of Hybrid Polyacrylamide Hydrogels Containing Silica Nanoparticles Studied by Dynamic Light Scattering. <i>Macromolecules</i> , 2013, 46, 4567-4574.   | 4.8  | 38        |
| 36 | Time Dependence of Dissipative and Recovery Processes in Nanohybrid Hydrogels. <i>Macromolecules</i> , 2013, 46, 4095-4104.   | 4.8  | 114       |

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|----|---|-----|-----------|
| 37 | Dynamics of Hybrid Poly(acrylamide-co-N,N-dimethylacrylamide) Hydrogels Containing Silica Nanoparticles Studied by Dynamic Light Scattering. <i>Macromolecules</i> , 2013, 46, 5329-5336.           | 4.8 | 20        |
| 38 | Thermodynamic behavior of hydrophobically modified polyacrylamide containing random distribution of hydrophobes: Experimental and theoretical investigations. <i>Polymer</i> , 2013, 54, 2676-2689. | 3.8 | 15        |
| 39 | pH-Responsive Swelling of Poly(acrylic acid) Brushes Synthesized by the Grafting Onto Route. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 2882-2890.                                    | 2.2 | 20        |
| 40 | Structure of Surfaces and Interfaces of Poly(N,N-dimethylacrylamide) Hydrogels. <i>Langmuir</i> , 2012, 28, 12282-12287.  | 3.5 | 20        |
| 41 | Cyclodextrin Polymer Nanoassemblies: Strategies for Stability Improvement. <i>Biomacromolecules</i> , 2012, 13, 528-534.  | 5.4 | 21        |
| 42 | Reversible adhesion between a hydrogel and a polymer brush. <i>Soft Matter</i> , 2012, 8, 8184.   | 2.7 | 90        |
| 43 | pH/Temperature control of interpolymer complexation between poly(acrylic acid) and weak polybases in aqueous solutions. <i>Polymer</i> , 2012, 53, 379-385.   | 3.8 | 25        |
| 44 | Synthesis and Characterization of Poly(acrylic acid) Brushes: "Grafting Onto" Route. <i>Macromolecular Chemistry and Physics</i> , 2012, 213, 293-300.  | 2.2 | 13        |
| 45 | Effect of polymer-particle interaction on the fracture toughness of silica filled hydrogels. <i>Soft Matter</i> , 2011, 7, 6578.  | 2.7 | 46        |
| 46 | Thermoresponsive Interpolyelectrolyte Complexation: Application to Macromolecular Assemblies. <i>Macromolecules</i> , 2011, 44, 8185-8194.  | 4.8 | 20        |
| 47 | Large Strain and Fracture Properties of Poly(dimethylacrylamide)/Silica Hybrid Hydrogels. <i>Macromolecules</i> , 2010, 43, 2554-2563.  | 4.8 | 265       |
| 48 | Nano-hybrid self-crosslinked PDMA/silica hydrogels. <i>Soft Matter</i> , 2010, 6, 3619.   | 2.7 | 119       |
| 49 | pH- and Thermo-responsive Polymer Assemblies in Aqueous Solution. , 2010, , 19-22.  |     | 1         |
| 50 | Synthesis and self assembly processes of aqueous thermoresponsive hybrid formulations. <i>Soft Matter</i> , 2010, 6, 2178.  | 2.7 | 9         |
| 51 | Large strain behaviour of nanostructured polyelectrolyte hydrogels. <i>Polymer</i> , 2009, 50, 481-490.   | 3.8 | 47        |
| 52 | Synthesis and self-assembling properties of 1-hydroxy-poly(ethylene oxide) end-capped with 1-isocyanato-3-pentadecylcyclohexane. <i>Polymer</i> , 2008, 49, 4635-4646.                              | 3.8 | 11        |
| 53 | Strain induced clustering in polyelectrolyte hydrogels. <i>Soft Matter</i> , 2008, 4, 1011.   | 2.7 | 41        |
| 54 | Responsive Hybrid Self-Assemblies in Aqueous Media. <i>Langmuir</i> , 2007, 23, 147-158.  | 3.5 | 75        |

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|----|---|-----|-----------|
| 55 | Synthesis and Viscoelastic Properties of Hydrophobically Modified Hydrogels. <i>Macromolecular Symposia</i> , 2007, 256, 189-194.   | 0.7 | 14        |
| 56 | Synthesis of graft polyacrylamide with responsive self-assembling properties in aqueous media. <i>Polymer</i> , 2007, 48, 7098-7112.  | 3.8 | 62        |
| 57 | Synthesis and Rheological Behavior of New Hydrophobically Modified Hydrogels with Tunable Properties. <i>Macromolecules</i> , 2006, 39, 8128-8139.  | 4.8 | 84        |
| 58 | Hybrid thickeners in aqueous media. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 278, 26-32.   | 4.7 | 37        |
| 59 | Hydrophobically Modified Poly(acrylic acid) Using 3-Pentadecylcyclohexylamine: Synthesis and Rheology. <i>Macromolecular Chemistry and Physics</i> , 2005, 206, 464-472.  | 2.2 | 21        |
| 60 | Thermoreversible Behavior of Associating Polymer Solutions: A Thermothinning versus Thermothickening. <i>Macromolecules</i> , 2005, 38, 8512-8521.  | 4.8 | 74        |
| 61 | Hydrophobically Modified Dimethylacrylamide Synthesis and Rheological Behavior. <i>Macromolecules</i> , 2005, 38, 2981-2989.  | 4.8 | 63        |
| 62 | Thermally Induced Gelation of Poly(acrylamide) Grafted with Poly(N-isopropylacrylamide): A Small-Angle Neutron Scattering Study. <i>Macromolecules</i> , 2004, 37, 5682-5691.   | 4.8 | 33        |
| 63 | New block-copolymer thermoassociating matrices for DNA sequencing: Effect of molecular structure on rheology and resolution. <i>Electrophoresis</i> , 2001, 22, 720-728.  | 2.4 | 67        |
| 64 | Synthesis and characterization of positively charged amphiphilic water soluble polymers based on poly(N-isopropylacrylamide). <i>Polymer</i> , 2001, 42, 6329-6337.   | 3.8 | 37        |
| 65 | Thermoassociative graft copolymers based on poly(N-isopropylacrylamide): Relation between the chemical structure and the rheological properties. <i>Macromolecular Chemistry and Physics</i> , 2000, 201, 858-868.          | 2.2 | 47        |
| 66 | Thermogelation in Aqueous Polymer Solutions. <i>ACS Symposium Series</i> , 2000, , 181-207.   | 0.5 | 14        |
| 67 | Thermoassociative Graft Copolymers: A NMR Investigation and Comparison with Rheological Behaviour. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9371-9377.   | 2.6 | 46        |
| 68 | Synthesis and thermoassociative properties in aqueous solution of graft copolymers containing poly(N-isopropylacrylamide) and poly(acrylic acid). <i>Macromolecular Chemistry and Physics</i> , 2000, 201, 1387-1392.       | 3.8 | 179       |
| 69 | Molar mass control of poly(N-isopropylacrylamide) and poly(acrylic acid) in aqueous polymerizations initiated by redox initiators based on persulfates. <i>Macromolecular Chemistry and Physics</i> , 1998, 199, 1387-1392. | 2.2 | 53        |
| 70 | Swelling of Poly(acrylamide) Gels with Pendant Poly(ethylene oxide) Chains in Solutions of Ionic Surfactant and Salt. <i>Langmuir</i> , 1998, 14, 777-782.  | 3.5 | 19        |
| 71 | pH-Responsive Gels of Hydrophobically Modified Poly(acrylic acid). <i>Macromolecules</i> , 1997, 30, 8278-8285.   | 4.8 | 334       |
| 72 | Swelling of polyacrylamide gels with pendant poly(ethylene oxide) chains in water and in ionic surfactant solutions. <i>Langmuir</i> , 1993, 9, 3324-3326.  | 3.5 | 23        |

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|----|--|------|-----------|
| 73 | Solution properties of pectin polysaccharides III: Molecular size of heterogeneous pectin chains. Calibration and application of SEC to pectin analysis. Carbohydrate Polymers, 1991, 16, 409-432. | 10.2 | 15        |
| 74 | Solution properties of pectin polysaccharides II. Conformation and molecular size of high galacturonic acid content isolated pectin chains. Carbohydrate Polymers, 1991, 16, 113-135.              | 10.2 | 34        |
| 75 | Mechanism insights in controlling host-guest (de)complexation by thermoresponsive polymer phase transitions. Polymer Chemistry, 0, , .   | 3.9  | 1         |