

Christian Pellerin

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Molecular Orientation in Electrospun Fibers: From Mats to Single Fibers. <i>Macromolecules</i> , 2013, 46, 9473-9493.	4.8	236
2	Spectroscopic and Optical Characterization of a Series of Azobenzene-Containing Side-Chain Liquid Crystalline Polymers. <i>Macromolecules</i> , 2000, 33, 6815-6823.	4.8	106
3	Submolecular Plasticization Induced by Photons in Azobenzene Materials. <i>Journal of the American Chemical Society</i> , 2015, 137, 13510-13517.	13.7	76
4	Accurate New Method for Molecular Orientation Quantification Using Polarized Raman Spectroscopy. <i>Macromolecules</i> , 2013, 46, 5561-5569.	4.8	65
5	Quantifying Polymer Chain Orientation in Strong and Tough Nanofibers with Low Crystallinity: Toward Next Generation Nanostructured Superfibers. <i>ACS Nano</i> , 2019, 13, 4893-4927.	14.6	55
6	Orientation and Structure of Single Electrospun Nanofibers of Poly(ethylene terephthalate) by Confocal Raman Spectroscopy. <i>Macromolecules</i> , 2012, 45, 1946-1953.	4.8	54
7	Orientation and Partial Disentanglement in Individual Electrospun Fibers: Diameter Dependence and Correlation with Mechanical Properties. <i>Macromolecules</i> , 2015, 48, 4511-4519.	4.8	51
8	Cross-Linked Polyacrylonitrile-Based Elastomer Used as Gel Polymer Electrolyte in Li-Ion Battery. <i>ACS Applied Energy Materials</i> , 2020, 3, 1099-1110.	5.1	49
9	Highly Oriented Electrospun Fibers of Self-Assembled Inclusion Complexes of Poly(ethylene oxide) and Urea. <i>Macromolecules</i> , 2006, 39, 8886-8888.	4.8	47
10	Solvent Influence on Thickness, Composition, and Morphology Variation with Dip-Coating Rate in Supramolecular PS- <i>b</i> -P4VP Thin Films. <i>Macromolecules</i> , 2015, 48, 4823-4834.	4.8	42
11	Orientation and relaxation of orientation of amorphous poly(ethylene terephthalate). <i>Polymer</i> , 2001, 42, 9051-9058.	3.8	41
12	Solid-State NMR Structure Determination of Whole Anchoring Threads from the Blue Mussel <i>Mytilus edulis</i> . <i>Biomacromolecules</i> , 2013, 14, 132-141.	5.4	41
13	Role of hydrogen bonding in the formation of glasses by small molecules: a triazine case study. <i>Journal of Materials Chemistry</i> , 2009, 19, 2747.	6.7	39
14	Characterization of the stable and metastable poly(ethylene oxide)–urea complexes in electrospun fibers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1903-1913.	2.1	38
15	Study of polymer orientation and relaxation by polarization modulation and 2D-FTIR spectroscopy. <i>Vibrational Spectroscopy</i> , 1998, 18, 103-110.	2.2	37
16	Molecular Origin of the Odd–Even Effect of Macroscopic Properties of <i>n</i> -Alkanethiolate Self-Assembled Monolayers: Bulk or Interface?. <i>Journal of the American Chemical Society</i> , 2020, 142, 13051-13061.	13.7	35
17	Impact of open sea habitat on byssus attachment of suspension-cultured blue mussels (<i>Mytilus edulis</i>). <i>Aquaculture</i> , 2014, 426-427, 189-196.	3.5	34
18	Orientation and Relaxation Study of Miscible Polystyrene/Poly(vinyl methyl ether) Blends. <i>Macromolecules</i> , 2000, 33, 7009-7015.	4.8	33

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19	Performance and Application of a New Planar Array Infrared Spectrograph Operating in the Mid-Infrared (2000–975 cm ⁻¹) Fingerprint Region. <i>Applied Spectroscopy</i> , 2004, 58, 639-646.	2.2	33
20	Enhancing the Electrospinnability of Low Molecular Weight Polymers Using Small Effective Cross-Linkers. <i>Macromolecules</i> , 2016, 49, 891-899.	4.8	32
21	Novel Method for Quantifying Molecular Orientation by Polarized Raman Spectroscopy: A Comparative Simulations Study. <i>Applied Spectroscopy</i> , 2013, 67, 409-419.	2.2	31
22	Evolution of Small Molecule Content and Morphology with Dip-Coating Rate in Supramolecular PS/P4VP Thin Films. <i>Macromolecules</i> , 2012, 45, 7964-7972.	4.8	28
23	Influence of Hydrogen Bonding on the Kinetic Stability of Vapor-Deposited Glasses of Triazine Derivatives. <i>Journal of Physical Chemistry B</i> , 2017, 121, 2350-2358.	2.6	28
24	Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds. <i>Macromolecules</i> , 2015, 48, 7535-7542.	4.8	27
25	Influence of Supramolecular Interaction Type on Photoresponsive Azopolymer Complexes: A Surface Relief Grating Formation Study. <i>Macromolecules</i> , 2016, 49, 4923-4934.	4.8	27
26	Metal-Ligand Interactions and Salt Bridges as Sacrificial Bonds in Mussel Byssus-Derived Materials. <i>Biomacromolecules</i> , 2016, 17, 3277-3286.	5.4	27
27	Structure and Phase Behavior of the Poly(ethylene oxide)-Thiourea Complex Prepared by Electrospinning. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2373-2378.	2.6	26
28	Thermal and Rheological Properties of Triazine-Based Molecular Glasses: Incriminating Evidence Against Hydrogen Bonds. <i>Journal of Physical Chemistry B</i> , 2009, 113, 14884-14891.	2.6	25
29	Time-Resolved Infrared Spectroscopic Studies of Poly(ethylene terephthalate) Deformation. <i>Macromolecules</i> , 2006, 39, 6546-6551.	4.8	24
30	Miscible and Core-Shell PS/PVME Fibers by Electrospinning. <i>Macromolecules</i> , 2011, 44, 2838-2843.	4.8	24
31	Stability and phase behavior of the poly(ethylene oxide)-urea complexes prepared by electrospinning. <i>Polymer</i> , 2009, 50, 2601-2607.	3.8	22
32	New Developments in Planar Array Infrared Spectroscopy. <i>Applied Spectroscopy</i> , 2005, 59, 156-163.	2.2	21
33	Cell-culture compatible silk fibroin scaffolds concomitantly patterned by freezing conditions and salt concentration. <i>Polymer Bulletin</i> , 2011, 67, 159-175.	3.3	20
34	One ring to rule them all: effect of aryl substitution on glass-forming ability in mexylaminotriazine molecular glasses. <i>Tetrahedron</i> , 2012, 68, 10130-10144.	1.9	20
35	Deformation and Relaxation of Polymers Studied by Ultrarapid Scanning FT-IR Spectrometry. <i>Macromolecules</i> , 2003, 36, 4838-4843.	4.8	19
36	Supramolecular control of liquid crystals by doping with halogen-bonding dyes. <i>RSC Advances</i> , 2017, 7, 40237-40242.	3.6	18

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37	Raman spectroscopy of individual poly(ethylene oxide) electrospun fibers: Effect of the collector on molecular orientation. <i>Vibrational Spectroscopy</i> , 2017, 91, 92-98.	2.2	18
38	Electrospinning of Highly Crystalline Polymers for Strongly Oriented Fibers. <i>ACS Applied Polymer Materials</i> , 2020, 2, 5025-5032.	4.4	18
39	Influence of the Reference Temperature on the Orientation and Relaxation of Miscible Polystyrene/Poly(vinyl methyl ether) Blends. <i>Macromolecules</i> , 2003, 36, 153-161.	4.8	17
40	Heads vs. tails: a double-sided study of the influence of substituents on the glass-forming ability and stability of aminotriazine molecular glasses. <i>New Journal of Chemistry</i> , 2013, 37, 3881.	2.8	17
41	Interspecies comparison of the mechanical properties and biochemical composition of byssal threads. <i>Journal of Experimental Biology</i> , 2017, 220, 984-994.	1.7	17
42	Orientation and Relaxation in Thick Poly(ethylene Terephthalate) Films by Transmission Infrared Linear Dichroism. <i>Applied Spectroscopy</i> , 2002, 56, 17-23.	2.2	16
43	The effect of spawning of cultured mussels (<i>Mytilus edulis</i>) on mechanical properties, chemical and biochemical composition of byssal threads. <i>Aquaculture</i> , 2013, 410-411, 11-17.	3.5	16
44	Effect of small molecule hydrogen-bond crosslinker and solvent power on the electrospinnability of poly(4-vinyl pyridine). <i>Polymer</i> , 2015, 57, 62-69.	3.8	16
45	Partial Disentanglement in Continuous Polystyrene Electrospun Fibers. <i>Macromolecules</i> , 2015, 48, 37-42.	4.8	16
46	Unraveling the interplay between hydrogen bonding and rotational energy barrier to fine-tune the properties of triazine molecular glasses. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1681-1692.	2.8	16
47	Molecular-Level Study of Photoorientation in Hydrogen-Bonded Azopolymer Complexes. <i>Macromolecules</i> , 2018, 51, 1077-1087.	4.8	16
48	Acquisition of Mid-Infrared Spectra from Nonrepeatable Events with Sub-100-ns Temporal Resolution Using Planar Array Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2004, 76, 1811-1816.	6.5	15
49	In Situ Photocontrol of Block Copolymer Morphology During Dip-Coating of Thin Films. <i>ACS Macro Letters</i> , 2015, 4, 1158-1162.	4.8	15
50	Polysulfobetaine-surfactant solutions and their use in stabilizing hydrophobic compounds in saline solution. <i>Polymer</i> , 2017, 127, 77-87.	3.8	15
51	A New Method for the Time-Resolved Analysis of Structure and Orientation: Polarization Modulation Infrared Structural Absorbance Spectroscopy. <i>Applied Spectroscopy</i> , 2008, 62, 941-947.	2.2	13
52	Infrared and fluorescence spectroscopy investigation of the orientation of two fluorophores in stretched polymer films. <i>Polymer</i> , 2013, 54, 730-736.	3.8	13
53	Polarized Raman Analysis of Polymer Chain Orientation in Ultrafine Individual Nanofibers with Variable Low Crystallinity. <i>Macromolecules</i> , 2018, 51, 8746-8751.	4.8	13
54	Electrospinning as a New Method for Preparing Pure Polymer Complexes. <i>Macromolecules</i> , 2010, 43, 4986-4990.	4.8	12

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55	Self-assembled pH-responsive films prepared from mussel anchoring threads. <i>Journal of Materials Chemistry B</i> , 2014, 2, 6378.	5.8	12
56	Bridging the Gap between the Mesoscopic 2D Orderâ€“Order Transition and Molecular-Level Reorganization in Dot-Patterned Block Copolymer Monolayers. <i>Macromolecules</i> , 2016, 49, 9089-9099.	4.8	12
57	Photoactive/Passive Molecular Glass Blends: An Efficient Strategy to Optimize Azomaterials for Surface Relief Grating Inscription. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 798-808.	8.0	12
58	Eumelanin for natureâ€“inspired UVâ€“absorption enhancement of plastics. <i>Polymer International</i> , 2019, 68, 984-991.	3.1	12
59	Effect of thermal history on the molecular orientation in polystyrene/poly(vinyl methyl ether) blends. <i>Polymer</i> , 2003, 44, 3291-3297.	3.8	11
60	A Faster Approach to Infrared Rheo-Optics Using a Planar Array Infrared Spectrograph. <i>Applied Spectroscopy</i> , 2004, 58, 799-803.	2.2	11
61	Study of Molecular Orientation by Vibrational Spectroscopy: From Polymers to Silk. <i>Macromolecular Symposia</i> , 2005, 220, 85-98.	0.7	11
62	Glass versus Crystal: A Balancing Act between Competing Intermolecular Interactions. <i>Crystal Growth and Design</i> , 2017, 17, 2365-2373.	3.0	11
63	Quantitative analysis of hydrogen bonding in electrospun fibers of poly(4-vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (m 2014, 71, 18-23.	2.2	10
64	Acrylonitrileâ€“butadiene rubber reinforced by graphene oxide/halloysite nanotubes hybrid nanofillers through mechanical blending method. <i>Plastics, Rubber and Composites</i> , 2020, 49, 141-149.	2.0	10
65	Electrospinning of supramolecular polymer complexes. <i>Science China Chemistry</i> , 2013, 56, 24-32.	8.2	9
66	Eumelanin: From Molecular State to Film. <i>Journal of Physical Chemistry C</i> , 2021, 125, 3567-3576.	3.1	9
67	Molecular Orientation and Relaxation in Uniaxially Stretched Segmented PTMO Zwitterionomers by Polarization Modulation Infrared Linear Dichroism. <i>Macromolecules</i> , 2005, 38, 4377-4383.	4.8	7
68	Chapter 8 Characterization of Molecular Orientation. <i>Comprehensive Analytical Chemistry</i> , 2008, , 295-335.	1.3	7
69	Taming Macromolecules with Light: Lessons Learned from Vibrational Spectroscopy. <i>Macromolecular Rapid Communications</i> , 2018, 39, 1700430.	3.9	6
70	Azobenzene molecular glasses with tuned glass transition temperatures: from optimal light-induced motion to self-erasable gratings. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6203-6213.	5.5	5
71	On the Importance of Noncrystalline Phases in Semicrystalline Electrospun Nanofibers. <i>ACS Applied Polymer Materials</i> , 2021, 3, 6315-6325.	4.4	5
72	Water-triggered spontaneous surface patterning in thin films of mexylaminotriazine molecular glasses. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4729-4736.	5.5	4

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73	Photocontrol of Supramolecular Azo-Containing Block Copolymer Thin Films during Dip-Coating: Toward Nanoscale Patterned Coatings. ACS Applied Nano Materials, 2019, 2, 3526-3537.	5.0	4
74	Triazine-based molecular glasses frustrate the crystallization of barbiturates. CrystEngComm, 2019, 21, 1734-1741.	2.6	4
75	Time-resolved polymer deformation using polarized planar array infrared spectroscopy. Vibrational Spectroscopy, 2009, 51, 34-38.	2.2	3
76	Electrospinning of Ionic Supramolecular Azo Complexes. Macromolecular Symposia, 2014, 336, 30-38.	0.7	3
77	Selective Isotopic Labeling Resolves the Gel-to-Fluid Phase Transitions of the Individual Leaflets of a Planar-Supported Phospholipid Bilayer. Langmuir, 2019, 35, 9912-9922.	3.5	3
78	Smart Packaging in the Sustainability Challenge: Eumelanin as a UV-Absorption Enhancer of Polymers. IEEE Nanotechnology Magazine, 2019, 18, 1160-1165.	2.0	3
79	Glass engineering of aminotriazine-based materials with sub-ambient T_g and high kinetic stability. CrystEngComm, 2020, 22, 4275-4288.	2.6	3
80	Effect of hydrogen-bond strength on photoresponsive properties of polymer-azobenzene complexes. Canadian Journal of Chemistry, 2020, 98, 531-538.	1.1	3
81	Planar Array Infrared Emission Spectroscopy. Analytical Chemistry, 2007, 79, 2037-2041.	6.5	2
82	Electrospinning and Characterization of the Stable and "Metastable" Self-Assembled Poly(ethylene Terephthalate) / Overlock 10	0.1	2
83	Planar Array Transient Infrared Spectroscopy: A New Tool for the Time-Resolved Analysis of Polymers. Macromolecular Symposia, 2008, 265, 21-27.	0.7	2
84	Preparation of the Pure Poly(ϵ -caprolactone)-Urea Complex by Electro Spray. Soft Materials, 2011, 9, 295-302.	1.7	2
85	Covalently crosslinked mussel byssus protein-based materials with tunable properties. Peptide Science, 2019, 111, e24053.	1.8	2
86	Polymer Complexes with Congruent and Incongruent Fusion by Spin Coating. Macromolecular Symposia, 2011, 303, 42-47.	0.7	1
87	Molecular-Level Photo-Orientation Insights into Macroscopic Photo-Induced Motion in Azobenzene-Containing Polymer Complexes. Journal of Physical Chemistry B, 2021, 125, 7871-7885.	2.6	1
88	Raman Investigation of the Processing Structure Relations in Individual Poly(ethylene terephthalate) Electrospun Fibers. Applied Spectroscopy, 2021, , 000370282110492.	2.2	1
89	Parity Effects in the Physicochemical Properties of Self-Assembled Monolayers. ECS Meeting Abstracts, 2020, MA2020-02, 2880-2880.	0.0	1
90	Analysis of time-resolved polarization modulation infrared linear dichroism spectra by 2D-IR correlation spectroscopy. AIP Conference Proceedings, 2000, , .	0.4	0

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91	Probing interfacial interactions and dynamics of polymers enclosed in boron nitride nanotubes. Journal of Polymer Science, 2022, 60, 233-243.	3.8	0