Christian Pellerin

List of Publications by Year
in descending order

91	2,014	236925 25	289244 40
papers	citations	h-index	g-index

91	91	91	2330
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing interfacial interactions and dynamics of polymers enclosed in boron nitride nanotubes. Journal of Polymer Science, 2022, 60, 233-243.	3.8	0
2	Eumelanin: From Molecular State to Film. Journal of Physical Chemistry C, 2021, 125, 3567-3576.	3.1	9
3	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
4	Raman Investigation of the Processing Structure Relations in Individual Poly(ethylene terephthalate) Electrospun Fibers. Applied Spectroscopy, 2021, , 000370282110492.	2.2	1
5	On the Importance of Noncrystalline Phases in Semicrystalline Electrospun Nanofibers. ACS Applied Polymer Materials, 2021, 3, 6315-6325.	4.4	5
6	Cross-Linked Polyacrylonitrile-Based Elastomer Used as Gel Polymer Electrolyte in Li-Ion Battery. ACS Applied Energy Materials, 2020, 3, 1099-1110.	5.1	49
7	Electrospinning of Highly Crystalline Polymers for Strongly Oriented Fibers. ACS Applied Polymer Materials, 2020, 2, 5025-5032.	4.4	18
8	Glass engineering of aminotriazine-based materials with sub-ambient T_g and high kinetic stability. CrystEngComm, 2020, 22, 4275-4288.	2.6	3
9	Molecular Origin of the Oddâ€“Even Effect of Macroscopic Properties of n-Alkanethiolate Self-Assembled Monolayers: Bulk or Interface?. Journal of the American Chemical Society, 2020, 142, 13051-13061.	13.7	35
10	Acrylonitrileâ€“butadiene rubber reinforced by graphene oxide/halloysite nanotubes hybrid nanofillers through mechanical blending method. Plastics, Rubber and Composites, 2020, 49, 141-149.	2.0	10
11	Azobenzene molecular glasses with tuned glass transition temperatures: from optimal light-induced motion to self-erasable gratings. Journal of Materials Chemistry C, 2020, 8, 6203-6213.	5.5	5
12	Effect of hydrogen-bond strength on photoresponsive properties of polymer-azobenzene complexes. Canadian Journal of Chemistry, 2020, 98, 531-538.	1.1	3
13	Parity Effects in the Physicochemical Properties of Self-Assembled Monolayers. ECS Meeting Abstracts, 2020, MA2020-02, 2880-2880.	0.0	1
14	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
15	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
16	Quantifying Polymer Chain Orientation in Strong and Tough Nanofibers with Low Crystallinity: Toward Next Generation Nanostructured Superfibers. ACS Nano, 2019, 13, 4893-4927.	14.6	55
17	Triazine-based molecular glasses frustrate the crystallization of barbiturates. CrystEngComm, 2019, 21, 1734-1741.	2.6	4
18	Eumelanin for natureâ€inspired UVâ€absorption enhancement of plastics. Polymer International, 2019, 68, 984-991.	3.1	12

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19	Smart Packaging in the Sustainability Challenge: Eumelanin as a UV-Absorption Enhancer of Polymers. IEEE Nanotechnology Magazine, 2019, 18, 1160-1165.	2.0	3
20	Covalently crosslinked mussel byssus proteinâ€based materials with tunable properties. Peptide Science, 2019, 111, e24053.	1.8	2
21	Molecular-Level Study of Photoorientation in Hydrogen-Bonded Azopolymer Complexes. Macromolecules, 2018, 51, 1077-1087.	4.8	16
22	Taming Macromolecules with Light: Lessons Learned from Vibrational Spectroscopy. Macromolecular Rapid Communications, 2018, 39, 1700430.	3.9	6
23	Polarized Raman Analysis of Polymer Chain Orientation in Ultrafine Individual Nanofibers with Variable Low Crystallinity. Macromolecules, 2018, 51, 8746-8751.	4.8	13
24	Interspecies comparison of the mechanical properties and biochemical composition of byssal threads. Journal of Experimental Biology, 2017, 220, 984-994.	1.7	17
25	Influence of Hydrogen Bonding on the Kinetic Stability of Vapor-Deposited Glasses of Triazine Derivatives. Journal of Physical Chemistry B, 2017, 121, 2350-2358.	2.6	28
26	Glass versus Crystal: A Balancing Act between Competing Intermolecular Interactions. Crystal Growth and Design, 2017, 17, 2365-2373.	3.0	11
27	Photoactive/Passive Molecular Glass Blends: An Efficient Strategy to Optimize Azomaterials for Surface Relief Grating Inscription. ACS Applied Materials & Interfaces, 2017, 9, 798-808.	8.0	12
28	Supramolecular control of liquid crystals by doping with halogen-bonding dyes. RSC Advances, 2017, 7, 40237-40242.	3.6	18
29	Polysulfobetaine-surfactant solutions and their use in stabilizing hydrophobic compounds in saline solution. Polymer, 2017, 127, 77-87.	3.8	15
30	Raman spectroscopy of individual poly(ethylene oxide) electrospun fibers: Effect of the collector on molecular orientation. Vibrational Spectroscopy, 2017, 91, 92-98.	2.2	18
31	Influence of Supramolecular Interaction Type on Photoresponsive Azopolymer Complexes: A Surface Relief Grating Formation Study. Macromolecules, 2016, 49, 4923-4934.	4.8	27
32	Metalâ€“Ligand Interactions and Salt Bridges as Sacrificial Bonds in Mussel Byssus-Derived Materials. Biomacromolecules, 2016, 17, 3277-3286.	5.4	27
33	Bridging the Gap between the Mesoscopic 2D Orderâ€“Order Transition and Molecular-Level Reorganization in Dot-Patterned Block Copolymer Monolayers. Macromolecules, 2016, 49, 9089-9099.	4.8	12
34	Enhancing the Electrospinnability of Low Molecular Weight Polymers Using Small Effective Cross-Linkers. Macromolecules, 2016, 49, 891-899.	4.8	32
35	Unraveling the interplay between hydrogen bonding and rotational energy barrier to fine-tune the properties of triazine molecular glasses. Physical Chemistry Chemical Physics, 2016, 18, 1681-1692.	2.8	16
36	Effect of small molecule hydrogen-bond crosslinker and solvent power on the electrospinnability of poly(4-vinyl pyridine). Polymer, 2015, 57, 62-69.	3.8	16

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37	Partial Disentanglement in Continuous Polystyrene Electrospun Fibers. Macromolecules, 2015, 48, 37-42.	4.8	16
38	Orientation and Partial Disentanglement in Individual Electrospun Fibers: Diameter Dependence and Correlation with Mechanical Properties. Macromolecules, 2015, 48, 4511-4519.	4.8	51
39	Solvent Influence on Thickness, Composition, and Morphology Variation with Dip-Coating Rate in Supramolecular PS-b-P4VP Thin Films. Macromolecules, 2015, 48, 4823-4834.	4.8	42
40	In Situ Photocontrol of Block Copolymer Morphology During Dip-Coating of Thin Films. ACS Macro Letters, 2015, 4, 1158-1162.	4.8	15
41	Submolecular Plasticization Induced by Photons in Azobenzene Materials. Journal of the American Chemical Society, 2015, 137, 13510-13517.	13.7	76
42	Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds. Macromolecules, 2015, 48, 7535-7542.	4.8	27
43	Water-triggered spontaneous surface patterning in thin films of mexylaminotriazine molecular glasses. Journal of Materials Chemistry C, 2015, 3, 4729-4736.	5.5	4
44	Electrospinning of Ionic Supramolecular Azo Complexes. Macromolecular Symposia, 2014, 336, 30-38.	0.7	3
45	Quantitative analysis of hydrogen bonding in electrospun fibers of poly(4-vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (p 2014, 71, 18-23.	2.2	10
46	Impact of open sea habitat on byssus attachment of suspension-cultured blue mussels (Mytilus edulis). Aquaculture, 2014, 426-427, 189-196.	3.5	34
47	Self-assembled pH-responsive films prepared from mussel anchoring threads. Journal of Materials Chemistry B, 2014, 2, 6378.	5.8	12
48	Accurate New Method for Molecular Orientation Quantification Using Polarized Raman Spectroscopy. Macromolecules, 2013, 46, 5561-5569.	4.8	65
49	Heads vs. tails: a double-sided study of the influence of substituents on the glass-forming ability and stability of aminotriazine molecular glasses. New Journal of Chemistry, 2013, 37, 3881.	2.8	17
50	Molecular Orientation in Electrospun Fibers: From Mats to Single Fibers. Macromolecules, 2013, 46, 9473-9493.	4.8	236
51	Infrared and fluorescence spectroscopy investigation of the orientation of two fluorophores in stretched polymer films. Polymer, 2013, 54, 730-736.	3.8	13
52	Electrospinning of supramolecular polymer complexes. Science China Chemistry, 2013, 56, 24-32.	8.2	9
53	The effect of spawning of cultured mussels (Mytilus edulis) on mechanical properties, chemical and biochemical composition of byssal threads. Aquaculture, 2013, 410-411, 11-17.	3.5	16
54	Solid-State NMR Structure Determination of Whole Anchoring Threads from the Blue Mussel Mytilus edulis. Biomacromolecules, 2013, 14, 132-141.	5.4	41

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55	Novel Method for Quantifying Molecular Orientation by Polarized Raman Spectroscopy: A Comparative Simulations Study. Applied Spectroscopy, 2013, 67, 409-419.	2.2	31
56	Evolution of Small Molecule Content and Morphology with Dip-Coating Rate in Supramolecular PSâ€“P4VP Thin Films. Macromolecules, 2012, 45, 7964-7972.	4.8	28
57	Orientation and Structure of Single Electrospun Nanofibers of Poly(ethylene terephthalate) by Confocal Raman Spectroscopy. Macromolecules, 2012, 45, 1946-1953.	4.8	54
58	One ring to rule them all: effect of aryl substitution on glass-forming ability in mexylaminotriazine molecular glasses. Tetrahedron, 2012, 68, 10130-10144.	1.9	20
59	Miscible and Coreâ^'Sheath PS/PVME Fibers by Electrospinning. Macromolecules, 2011, 44, 2838-2843.	4.8	24
60	Preparation of the Pure Poly(Ïµ-caprolactone)-Urea Complex by Electrospray. Soft Materials, 2011, 9, 295-302.	1.7	2
61	Cell-culture compatible silk fibroin scaffolds concomitantly patterned by freezing conditions and salt concentration. Polymer Bulletin, 2011, 67, 159-175.	3.3	20
62	Polymer Complexes with Congruent and Incongruent Fusion by Spin Coating. Macromolecular Symposia, 2011, 303, 42-47.	0.7	1
63	Structure and Phase Behavior of the Poly(ethylene oxide)â^'Thiourea Complex Prepared by Electrospinning. Journal of Physical Chemistry B, 2010, 114, 2373-2378.	2.6	26
64	Electrospinning as a New Method for Preparing Pure Polymer Complexes. Macromolecules, 2010, 43, 4986-4990.	4.8	12
65	Time-resolved polymer deformation using polarized planar array infrared spectroscopy. Vibrational Spectroscopy, 2009, 51, 34-38.	2.2	3
66	Stability and phase behavior of the poly(ethylene oxide)â€“urea complexes prepared by electrospinning. Polymer, 2009, 50, 2601-2607.	3.8	22
67	T_g and Rheological Properties of Triazine-Based Molecular Glasses: Incriminating Evidence Against Hydrogen Bonds. Journal of Physical Chemistry B, 2009, 113, 14884-14891.	2.6	25
68	Role of hydrogen bonding in the formation of glasses by small molecules: a triazine case study. Journal of Materials Chemistry, 2009, 19, 2747.	6.7	39
69	Characterization of the stable and metastable poly(ethylene oxide)â€“urea complexes in electrospun fibers. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1903-1913.	2.1	38
70	Chapter 8 Characterization of Molecular Orientation. Comprehensive Analytical Chemistry, 2008, , 295-335.	1.3	7
71	A New Method for the Time-Resolved Analysis of Structure and Orientation: Polarization Modulation Infrared Structural Absorbance Spectroscopy. Applied Spectroscopy, 2008, 62, 941-947.	2.2	13
72	Electrospinning and Characterization of the Stable and â€œMetastableâ€•Self-Assembled Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10	0.1	2

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73	Planar Array Transient Infrared Spectroscopy: A New Tool for the Timeâ€Resolved Analysis of Polymers. Macromolecular Symposia, 2008, 265, 21-27.	0.7	2
74	Planar Array Infrared Emission Spectroscopy. Analytical Chemistry, 2007, 79, 2037-2041.	6.5	2
75	Time-Resolved Infrared Spectroscopic Studies of Poly(ethylene terephthalate) Deformation. Macromolecules, 2006, 39, 6546-6551.	4.8	24
76	Highly Oriented Electrospun Fibers of Self-Assembled Inclusion Complexes of Poly(ethylene oxide) and Urea. Macromolecules, 2006, 39, 8886-8888.	4.8	47
77	Study of Molecular Orientation by Vibrational Spectroscopy: From Polymers to Silk. Macromolecular Symposia, 2005, 220, 85-98.	0.7	11
78	Molecular Orientation and Relaxation in Uniaxially Stretched Segmented PTMO Zwitterionomers by Polarization Modulation Infrared Linear Dichroism. Macromolecules, 2005, 38, 4377-4383.	4.8	7
79	New Developments in Planar Array Infrared Spectroscopy. Applied Spectroscopy, 2005, 59, 156-163.	2.2	21
80	Acquisition of Mid-Infrared Spectra from Nonrepeatable Events with Sub-100-Î¼s Temporal Resolution Using Planar Array Infrared Spectroscopy. Analytical Chemistry, 2004, 76, 1811-1816.	6.5	15
81	Performance and Application of a New Planar Array Infrared Spectrograph Operating in the Mid-Infrared (2000â€“975 cmâ^'1) Fingerprint Region. Applied Spectroscopy, 2004, 58, 639-646.	2.2	33
82	A Faster Approach to Infrared Rheo-Optics Using a Planar Array Infrared Spectrograph. Applied Spectroscopy, 2004, 58, 799-803.	2.2	11
83	Effect of thermal history on the molecular orientation in polystyrene/poly(vinyl methyl ether) blends. Polymer, 2003, 44, 3291-3297.	3.8	11
84	Influence of the Reference Temperature on the Orientation and Relaxation of Miscible Polystyrene/Poly(vinyl methyl ether) Blends. Macromolecules, 2003, 36, 153-161.	4.8	17
85	Deformation and Relaxation of Polymers Studied by Ultrarapid Scanning FT-IR Spectrometry. Macromolecules, 2003, 36, 4838-4843.	4.8	19
86	Orientation and Relaxation in Thick Poly(ethylene Terephthalate) Films by Transmission Infrared Linear Dichroism. Applied Spectroscopy, 2002, 56, 17-23.	2.2	16
87	Orientation and relaxation of orientation of amorphous poly(ethylene terephthalate). Polymer, 2001, 42, 9051-9058.	3.8	41
88	Spectroscopic and Optical Characterization of a Series of Azobenzene-Containing Side-Chain Liquid Crystalline Polymers. Macromolecules, 2000, 33, 6815-6823.	4.8	106
89	Analysis of time-resolved polarization modulation infrared linear dichroism spectra by 2D-IR correlation spectroscopy. AIP Conference Proceedings, 2000, , .	0.4	0
90	Orientation and Relaxation Study of Miscible Polystyrene/Poly(vinyl methyl ether) Blends. Macromolecules, 2000, 33, 7009-7015.	4.8	33

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91	Study of polymer orientation and relaxation by polarization modulation and 2D-FTIR spectroscopy. Vibrational Spectroscopy, 1998, 18, 103-110.	2.2	37