Jean Duhamel

List of Publications by Year
in descending order

106 papers	2,893 citations	186254 28 h-index	197805 49 g-index
106 all docs	106 docs citations	106 times ranked	1943 citing authors

#	Article	IF	Citations
1	Fluorescence Studies of Associating Polymers in Water: Determination of the Chain end Aggregation Number and a Model for the Association Process. Macromolecules, 1995, 28, 956-966.	4.8	273
2	New Insights in the Study of Pyrene Excimer Fluorescence to Characterize Macromolecules and their Supramolecular Assemblies in Solution. Langmuir, 2012, 28, 6527-6538.	3.5	184
3	A fluorescent probe study of micelle-like cluster formation in aqueous solutions of hydrophobically modified poly(ethylene oxide). Macromolecules, 1993, 26, 1829-1836.	4.8	165
4	Self-Assembling Peptide as a Potential Carrier of Hydrophobic Compounds. Journal of the American Chemical Society, 2004, 126, 7522-7532.	13.7	100
5	Polymer Chain Dynamics in Solution Probed with a Fluorescence Blob Model. Accounts of Chemical Research, 2006, 39, 953-960.	15.6	91
6	A Blob Model To Study Chain Folding by Fluorescence. Macromolecules, 1999, 32, 7100-7108.	4.8	84
7	Internal Dynamics of Dendritic Molecules Probed by Pyrene Excimer Formation. Polymers, 2012, 4, 211-239.	4.5	80
8	Side-Chain Dynamics of an Î±-Helical Polypeptide Monitored by Fluorescence. Journal of the American Chemical Society, 2003, 125, 12810-12822.	13.7	75
9	Global Analysis of Fluorescence Decays to Probe the Internal Dynamics of Fluorescently Labeled Macromolecules. Langmuir, 2014, 30, 2307-2324.	3.5	62
10	Fluorescence Emission of Ethidium Bromide Intercalated in Defined DNA Duplexes:Â Evaluation of Hydrodynamics Componentsâ€. Biochemistry, 1996, 35, 16687-16697.	2.5	61
11	Synthesis and Characterization of Novel Pyrene-Dendronized Porphyrins Exhibiting Efficient Fluorescence Resonance Energy Transfer: Optical and Photophysical Properties. Langmuir, 2012, 28, 11195-11205.	3.5	49
12	Comparison of the Association Level of a Pyrene-Labeled Associative Polymer Obtained from an Analysis Based on Two Different Models. Journal of Physical Chemistry B, 2005, 109, 1770-1780.	2.6	48
13	Fluorescence Resonance Energy Transfer in Partially and Fully Labeled Pyrene Dendronized Porphyrins Studied with Model Free Analysis. Journal of Physical Chemistry C, 2014, 118, 8280-8294.	3.1	47
14	Characterization of the Association Level of Pyrene-Labeled HASEs by Fluorescence. Macromolecules, 2001, 34, 7876-7884.	4.8	46
15	Effect of Solvent Quality on the Level of Association and Encounter Kinetics of Hydrophobic Pendants Covalently Attached onto a Water-Soluble Polymer. Macromolecules, 2002, 35, 8560-8570.	4.8	45
16	Coilâ"Globule Transition of Pyrene-Labeled Polystyrene in Cyclohexane:â€‰ Determination of Polymer Chain Radii by Fluorescence. Journal of Physical Chemistry B, 2004, 108, 12009-12015.	2.6	44
17	Probing End-to-End Cyclization beyond Willemski and Fixman. Journal of Physical Chemistry B, 2011, 115, 3289-3302.	2.6	44
18	A Study of the Dynamics of the Branch Ends of a Series of Pyrene-Labeled Dendrimers Based on Pyrene Excimer Formation. Journal of Physical Chemistry B, 2010, 114, 10254-10265.	2.6	42

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19	Scaling Relations Related to the Kinetics of Excimer Formation between Pyrene Groups Attached onto Poly(N,N-dimethylacrylamide)s. Macromolecules, 2002, 35, 8571-8577.	4.8	40
20	A Case for Using Randomly Labeled Polymers to Study Long-Range Polymer Chain Dynamics by Fluorescence. Journal of the American Chemical Society, 2008, 130, 9420-9428.	13.7	39
21	Long-Range Polymer Chain Dynamics of Pyrene-Labeled Poly(<i>N</i>-isopropylacrylamide)s Studied by Fluorescence. Macromolecules, 2011, 44, 5363-5372.	4.8	35
22	Effect of Side-Chain Length on the Polymer Chain Dynamics of Poly(alkyl methacrylate)s in Solution. Macromolecules, 2013, 46, 9738-9747.	4.8	35
23	Associations between a Pyrene-Labeled Hydrophobically Modified Alkali Swellable Emulsion Copolymer and Sodium Dodecyl Sulfate Probed by Fluorescence, Surface Tension, and Viscometry. Macromolecules, 2006, 39, 1144-1155.	4.8	34
24	Global Analysis of the Fluorescence Decays of a Pyrene-Labeled Polymer Using a Blob Model. Macromolecules, 2004, 37, 9287-9289.	4.8	33
25	Characterization of the Behavior of a Pyrene Substituted Gemini Surfactant in Water by Fluorescence. Langmuir, 2011, 27, 3361-3371.	3.5	33
26	Probing Side Chain Dynamics of Branched Macromolecules by Pyrene Excimer Fluorescence. Macromolecules, 2016, 49, 353-361.	4.8	33
27	Correlating Pyrene Excimer Formation with Polymer Chain Dynamics in Solution. Possibilities and Limitations. Macromolecules, 2007, 40, 6647-6657.	4.8	32
28	Characterization by Fluorescence of the Distribution of Maleic Anhydride Grafted onto Ethyleneâˆ’Propylene Copolymers. Macromolecules, 2004, 37, 1877-1890.	4.8	30
29	Rigid Interior of Styreneâˆ’Maleic Anhydride Copolymer Aggregates Probed by Fluorescence Spectroscopy. Langmuir, 2002, 18, 3829-3835.	3.5	29
30	Characterization of the Aggregates Made by Short Poly(ethylene oxide) Chains Labeled at One End with Pyrene. Macromolecules, 2005, 38, 2865-2875.	4.8	29
31	Monitoring the Hydrophobic Interactions of Internally Pyrene-Labeled Poly(ethylene oxide)s in Water by Fluorescence Spectroscopy. Macromolecules, 1998, 31, 9193-9200.	4.8	28
32	Effect of Side-chain Length on the Side-chain Dynamics of Î±-Helical Poly(<scp>l</scp>-glutamic acid) as Probed by a Fluorescence Blob Model. Journal of Physical Chemistry B, 2008, 112, 9209-9218.	2.6	28
33	Effect of Polypeptide Sequence on Polypeptide Self-Assembly. Langmuir, 2011, 27, 6639-6650.	3.5	28
34	Long Range Polymer Chain Dynamics Studied by Fluorescence Quenching. Macromolecules, 2016, 49, 6149-6162.	4.8	28
35	Applications of Pyrene Fluorescence to the Characterization of Hydrophobically Modified Starch Nanoparticles. Langmuir, 2018, 34, 8611-8621.	3.5	28
36	A blob model to study polymer chain dynamics in solution. The Journal of Physical Chemistry, 1993, 97, 13708-13712.	2.9	27

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37	Pyrene Excimer Fluorescence as a Direct and Easy Experimental Means To Characterize the Length Scale and Internal Dynamics of Polypeptide Foldons. Macromolecules, 2018, 51, 3450-3457.	4.8	27
38	Quantifying the Presence of Unwanted Fluorescent Species in the Study of Pyrene-Labeled Macromolecules. Journal of Physical Chemistry B, 2011, 115, 9921-9929.	2.6	24
39	Study of a Polymeric Network by Dynamic Fluorescence Quenching Using a Blob Model. Macromolecules, 1999, 32, 2845-2854.	4.8	23
40	The Importance of Considering Nonfluorescent Pyrene Aggregates for the Study of Pyrene-Labeled Associative Thickeners by Fluorescence. Macromolecules, 2005, 38, 7184-7186.	4.8	23
41	How switching the substituent of a pyrene derivative from a methyl to a butyl affects the fluorescence response of polystyrene randomly labeled with pyrene. Canadian Journal of Chemistry, 2010, 88, 217-227.	1.1	23
42	Molar Absorbance Coefficient of Pyrene Aggregates in Water Generated by a Poly(ethylene oxide) Capped at a Single End with Pyrene. Journal of Physical Chemistry B, 2012, 116, 1226-1233.	2.6	22
43	Pyrenyl Derivative with a Four-Atom Linker That Can Probe the Local Polarity of Pyrene-Labeled Macromolecules. Journal of Physical Chemistry B, 2016, 120, 834-842.	2.6	21
44	Extraction of Oil from Oil Sands Using Thermoresponsive Polymeric Surfactants. ACS Applied Materials & Interfaces, 2015, 7, 5879-5889.	8.0	20
45	Membrane Binding and Oligomerization of the Lipopeptide A54145 Studied by Pyrene Fluorescence. Biophysical Journal, 2016, 111, 1267-1277.	0.5	20
46	Study of the Semidilute Solutions of Poly(N,N-dimethylacrylamide) by Fluorescence and Its Implications to the Kinetics of Coil-to-Globule Transitions. Journal of Physical Chemistry B, 2006, 110, 2628-2637.	2.6	19
47	Chemical Modification of Polyisobutylene Succinimide Dispersants and Characterization of Their Associative Properties. Journal of Physical Chemistry B, 2015, 119, 12202-12211.	2.6	18
48	Surfactant Structure-Dependent Interactions with Modified Starch Nanoparticles Probed by Fluorescence Spectroscopy. Langmuir, 2019, 35, 3432-3444.	3.5	18
49	Maleated Ethylene-Propylene Random Copolymers:Â Determination of the Microstructure and Association Level by Fluorescence Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 4827-4839.	2.6	17
50	Studying Pyrene-Labeled Macromolecules with the Model-Free Analysis. Journal of Physical Chemistry B, 2012, 116, 14689-14699.	2.6	17
51	Conformation of Pyrene-Labeled Amylose in DMSO Characterized with the Fluorescence Blob Model. Macromolecules, 2016, 49, 7965-7974.	4.8	17
52	Fluorescence Properties of Poly(ethylene terephthalate-co-2,6-naphthalene dicarboxylate) with Naphthalene Contents Ranging from 0.01 to 100 mol. Macromolecules, 1999, 32, 2956-2961.	4.8	16
53	Maleic Anhydride Modified Oligo(isobutylene):Â Effect of Hydrogen Bonding on Its Associative Strength in Hexane Characterized by Fluorescence Spectroscopy. Macromolecules, 2001, 34, 1454-1469.	4.8	16
54	Interaction of a Self-Assembling Peptide with Oligonucleotides: Complexation and Aggregation. Biophysical Journal, 2007, 93, 2477-2490.	0.5	16

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55	Fluorescence studies of a series of monodisperse telechelic Î±,Ï‰-dipyrenyl poly(N-isopropylacrylamide)s in ethanol and in water. Canadian Journal of Chemistry, 2011, 89, 163-172.	1.1	16
56	Comparison of the long range polymer chain dynamics of polystyrene and cis-polyisoprene using polymers randomly labeled with pyrene. Polymer, 2009, 50, 5456-5466.	3.8	15
57	Interactions between a Series of Pyrene End-Labeled Poly(ethylene oxide)s and Sodium Dodecyl Sulfate in Aqueous Solution Probed by Fluorescence. Langmuir, 2014, 30, 13164-13175.	3.5	15
58	Characterization of the Long-Range Internal Dynamics of Pyrene-Labeled Macromolecules by Pyrene Excimer Fluorescence. Macromolecules, 2016, 49, 9597-9604.	4.8	15
59	Study of the Microcrystallization of Ethyleneâˆ’Propylene Random Copolymers in Solution by Fluorescence. Macromolecules, 2007, 40, 661-669.	4.8	14
60	Effect of Sequence on the Ionization Behavior of a Series of Amphiphilic Polypeptides. Langmuir, 2013, 29, 4451-4459.	3.5	14
61	Hydrophobic and Elastic Forces Experienced by a Series of Pyrene End-Labeled Poly(ethylene oxide)s Interacting with Sodium Dodecyl Sulfate Micelles. Macromolecules, 2018, 51, 5933-5943.	4.8	14
62	Diffusion reaction in restricted spaces of spherical symmetry: Surface quenching of luminescence. Journal of Chemical Physics, 1992, 97, 1554-1561.	3.0	13
63	Effect of Time on the Rate of Long Range Polymer Segmental Intramolecular Encounters. Journal of Physical Chemistry B, 2009, 113, 2284-2292.	2.6	13
64	Using Pyrene Excimer Fluorescence To Probe Polymer Diffusion in Latex Films. Macromolecules, 2017, 50, 1635-1644.	4.8	13
65	Interactions between Hydrophobically Modified Alkali-Swellable Emulsion Polymers and Sodium Dodecyl Sulfate Probed by Fluorescence and Rheology. Journal of Physical Chemistry B, 2014, 118, 351-361.	2.6	12
66	DiPyMe in SDS Micelles: Artifacts and Their Implications in the Interpretation of Micellar Properties. Langmuir, 2015, 31, 11971-11981.	3.5	12
67	Quantitative Characterization of the Molecular Dimensions of Flexible Dendritic Macromolecules in Solution by Pyrene Excimer Fluorescence. Macromolecules, 2018, 51, 1586-1590.	4.8	12
68	Arborescent Poly(<scp>l</scp>-glutamic acid)s as Standards To Study the Dense Interior of Polypeptide Mesoglobules by Pyrene Excimer Fluorescence. Macromolecules, 2018, 51, 7914-7923.	4.8	12
69	Effect of Viscosity on Long-Range Polymer Chain Dynamics in Solution Studied with a Fluorescence Blob Model. Macromolecules, 2009, 42, 1244-1251.	4.8	11
70	Effect of Structure on Polypeptide Blobs: A Model Study Using Poly(<scp>l</scp>-lysine). Langmuir, 2020, 36, 7980-7990.	3.5	11
71	Effect of Like Charges on the Conformation and Internal Dynamics of Polypeptides Probed by Pyrene Excimer Fluorescence. Macromolecules, 2020, 53, 5147-5157.	4.8	11
72	Characterization of the Distribution of Pyrene Molecules in Confined Geometries with the Model Free Analysis. Journal of Physical Chemistry B, 2017, 121, 11325-11332.	2.6	10

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73	Long Range Polymer Chain Dynamics of Highly Flexible Polysiloxane in Solution Probed by Pyrene Excimer Fluorescence. Polymers, 2018, 10, 345.	4.5	10
74	Detection of Nitroaromatics by Pyrene-Labeled Starch Nanoparticles. Langmuir, 2019, 35, 13145-13156.	3.5	10
75	Characterization of the ground state pyrene complex in ethylene-propylene copolymer solutions. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1173-1181.	2.1	9
76	Blob Model Analysis of the pH-Induced Fluorescence Quenching of Two Anthracene-Labeled Poly(2-vinylpyridine)s. Macromolecules, 2004, 37, 1987-1989.	4.8	9
77	Effect of Solvent Quality toward the Association of Succinimide Pendants of a Modified Ethyleneâˆ’Propylene Copolymer in Mixtures of Toluene and Hexane. Macromolecules, 2005, 38, 4438-4446.	4.8	9
78	New approaches to characterize polymeric oil additives in solution based on pyrene excimer fluorescence. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 7-18.	2.1	9
79	Temperature response of aqueous solutions of pyrene endâ€•labeled poly(<i>N</i>â€•isopropylacrylamide)s probed by steadyâ€•state and timeâ€•resolved fluorescence. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 308-318.	2.1	9
80	Direct Measure of the Local Concentration of Pyrenyl Groups in Pyrene-Labeled Dendrons Derived from the Rate of Fluorescence Collisional Quenching. Polymers, 2020, 12, 2919.	4.5	9
81	Quantifying the Level of Intermacromolecular Interactions in Ethyleneâ€“Propylene Copolymers by Using Pyrene Excimer Formation. Macromolecules, 2015, 48, 4620-4630.	4.8	8
82	Using Pyrene Excimer Fluorescence To Probe the Interactions between Viscosity Index Improvers and Waxes Present in Automotive Oil. Macromolecules, 2017, 50, 2467-2476.	4.8	8
83	Blob-Based Approach to Estimate the Folding Time of Proteins Supported by Pyrene Excimer Fluorescence Experiments. Macromolecules, 2020, 53, 9823-9835.	4.8	8
84	Blob-Based Predictions of Protein Folding Times from the Amino Acid-Dependent Conformation of Polypeptides in Solution. Macromolecules, 2021, 54, 919-929.	4.8	8
85	Determination of the Aggregation Number of Pyrene-Labeled Gemini Surfactant Micelles by Pyrene Fluorescence Quenching Measurements. Langmuir, 2021, 37, 6069-6079.	3.5	8
86	Long-Range, Polymer Chain Dynamics of a â€œStiffâ€•Polymer. Fluorescence from Poly(isobutylene-<i>alt</i>-maleic anhydride) with <i>N</i>-(1-Pyrenylmethyl)succinimide Groups. Macromolecules, 2017, 50, 3396-3403.	4.8	7
87	Study of maleated ethyleneâ€“propylene copolymers by fluorescence: Evidence for succinimide induced polar associations in an apolar solvent. European Polymer Journal, 2008, 44, 3005-3014.	5.4	6
88	The Effect of Amino Acid Size on the Internal Dynamics and Conformational Freedom of Polypeptides. Macromolecules, 2020, 53, 9811-9822.	4.8	6
89	Pyrene Excimer Formation (PEF) and Its Application to the Study of Polypeptide Dynamics. Langmuir, 2022, 38, 3623-3629.	3.5	6
90	Application of Time-Resolved Fluorescence Anisotropy To Probe Quinoline-Based Foldamers Labeled with Oligo(phenylene vinylene). Macromolecules, 2019, 52, 5829-5837.	4.8	5

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91	Probing the Interactions between Mimics of Pour Point Depressants (PPDs) and Viscosity Index Improvers (VIIs) in Engine Oil Using Fluorescently Labeled PPDs. Macromolecules, 2019, 52, 2651-2658.	4.8	5
92	A Pyrene Excimer Fluorescence (PEF) Study of the Interior of Amylopectin in Dilute Solution. Macromolecules, 2020, 53, 6850-6860.	4.8	5
93	Assemblies of Hydrophobically Modified Starch Nanoparticles Probed by Surface Tension and Pyrene Fluorescence. ACS Symposium Series, 2020, , 61-75.	0.5	5
94	Characterization of the Local Volume Probed by the Side-Chain Ends of Poly(oligo(ethylene glycol)) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Macromolecules, 2021, 54, 9341-9350.	4.8	5
95	Lateral Distribution of Charged Species along a Polyelectrolyte Probed with a Fluorescence Blob Model. Journal of the American Chemical Society, 2012, 134, 16791-16797.	13.7	4
96	Design, characterization, optical and photophysical properties of novel thiophene monomers and polymers containing pyrene moieties linked via rigid and flexible spacers. Synthetic Metals, 2019, 248, 102-109.	3.9	4
97	Effects of Glycine on the Local Conformation and Internal Backbone Dynamics of Polypeptides. Macromolecules, 2021, 54, 8904-8912.	4.8	4
98	Electron Transfer between Physically Bound Electron Donors and Acceptors: A Fluorescence Blob Model Approach. Journal of Physical Chemistry B, 2010, 114, 13950-13960.	2.6	3
99	Simplification in the Acquisition and Analysis of Fluorescence Decays Acquired with Polarized Emission for Time-Resolved Fluorescence Anisotropy Measurements. Analytical Chemistry, 2020, 92, 668-673.	6.5	3
100	Interior of Amylopectin and Nano-Sized Amylopectin Fragments Probed by Viscometry, Dynamic Light Scattering, and Pyrene Excimer Fluorescence. Polymers, 2020, 12, 2649.	4.5	3
101	Synthesis and Characterization of a Pyrene-Labeled Gemini Surfactant Sensitive to the Polarity of Its Environment. Langmuir, 2021, 37, 13824-13837.	3.5	3
102	Temperature-Controlled Interactions between Poly(N-isopropylacrylamide) Mesoglobules Probed by Fluorescence. Macromolecules, 2018, 51, 1946-1956.	4.8	2
103	Characterization of the Interactions between an Unassociated Cationic Pyrene-Labeled Gemini Surfactant and Anionic Sodium Dodecyl Sulfate. Langmuir, 2022, 38, 7484-7495.	3.5	2
104	Unfolding of Helical Poly(L-Glutamic Acid) in N,N-Dimethylformamide Probed by Pyrene Excimer Fluorescence (PEF). Polymers, 2021, 13, 1690.	4.5	1
105	Pyrene-Labeled Water-Soluble Macromolecules as Fluorescent Mimics of Associative Thickeners. Springer Series on Fluorescence, 2016, , 217-253.	0.8	1
106	Probing the Interactions between Pour Point Depressants (PPDs), Viscosity Index Improvers (VIIs), and Wax in Octane Using Fluorescently Labeled PPDs. Canadian Journal of Chemistry, 0, , .	1.1	0