## Robert E Prud'homme

List of Publications by Year in descending order

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101543 98798 5,099 131 36 67 citations g-index h-index papers 132 132 132 3469 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Crystallization and Melting Behavior of Polylactides. Macromolecules, 1998, 31, 3895-3905.	4.8	498
2	Stereocomplex Block Copolymer Micelles:Â Coreâ^'Shell Nanostructures with Enhanced Stability. Nano Letters, 2005, 5, 315-319.	9.1	323
3	Stereocomplexation and Morphology of Polylactides. Macromolecules, 1995, 28, 5230-5239.	4.8	244
4	Miscibility phenomena in polyester/chlorinated polymer blends. Polymer Engineering and Science, 1982, 22, 90-95.	3.1	180
5	In-Situ Hot Stage Atomic Force Microscopy Study of Poly(Îμ-caprolactone) Crystal Growth in Ultrathin Films. Macromolecules, 2005, 38, 398-408.	4.8	176
6	Characterization of molecular orientation in polyethylene by Raman spectroscopy. Macromolecules, 1991, 24, 5687-5694.	4.8	144
7	Miscibility of polycaprolactone/chlorinated polyethylene blends. Journal of Polymer Science, Polymer Physics Edition, 1982, 20, 191-203.	1.0	142
8	Analysis of the glass transition temperature of miscible polymer blends. Macromolecules, 1988, 21, 2945-2949.	4.8	134
9	Studies of polyester/chlorinated poly(vinyl chloride) blends. Polymer, 1982, 23, 1051-1056.	3.8	110
10	Crystallization of Ultrathin Films of Polylactides:  From Chain Chirality to Lamella Curvature and Twisting. Macromolecules, 2008, 41, 1705-1712.	4.8	110
11	Miscibility in Blends of Poly(vinyl chloride) and Polylactones. Macromolecules, 1980, 13, 365-369.	4.8	102
12	Robust Superhydrophobic Cotton Fibers Prepared by Simple Dip-Coating Approach Using Chemical and Plasma-Etching Pretreatments. ACS Omega, 2019, 4, 7829-7837.	3.5	89
13	Miscibility of poly(caprolactone)/chlorinated polypropylene and poly(caprolactone)/poly(chlorostyrene) blends. Journal of Applied Polymer Science, 1982, 27, 559-568.	2.6	88
14	Miscible blends prepared from two crystalline polymers. Journal of Polymer Science, Polymer Physics Edition, 1983, 21, 233-240.	1.0	77
15	Bonding at Symmetric Polymer/Polymer Interfaces below the Glass Transition Temperature. Macromolecules, 1997, 30, 3708-3710.	4.8	77
16	Healing of interfaces of amorphous and semi-crystalline poly(ethylene terephthalate) in the vicinity of the glass transition temperature. Polymer, 2001, 42, 8695-8702.	3.8	72
17	Synthesis and characterization of poly(L-lactide)s and poly(D-lactide)s of controlled molecular weight. Journal of Polymer Science Part A, 2007, 45, 1944-1955.	2.3	71
18	X-ray Pole Figure and Small Angle Scattering Measurements on Tubular Blown Low-Density Poly(ethylene) Films. Macromolecules, 1996, 29, 119-128.	4.8	68

#	Article	IF	Citations
19	Complex formation between enantiomeric polyesters. Journal of Polymer Science, Polymer Physics Edition, 1984, 22, 577-587.	1.0	65
20	Strength Development at the Interface of Amorphous Polymers and Their Miscible Blends, below the Glass Transition Temperature. Macromolecules, 1998, 31, 6620-6626.	4.8	65
21	Study of the distribution of molecular orientation in highly oriented polyethylene by x-ray diffraction. Macromolecules, 1991, 24, 4948-4956.	4.8	60
22	Chirality Information Transfer in Polylactides:Â From Main-Chain Chirality to Lamella Curvature. Macromolecules, 2006, 39, 4272-4275.	4.8	58
23	Growth Rates and Morphologies of Miscible PCL/PVC Blend Thin and Thick Films. Macromolecules, 2003, 36, 675-684.	4.8	57
24	On the relationship between the order parameter and the shape of orientation distributions. Canadian Journal of Chemistry, 1995, 73, 1497-1505.	1.1	56
25	Surface mobility and diffusion at interfaces of polystyrene in the vicinity of the glass transition. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 567-572.	2.1	54
26	Molecular orientation in crystalline miscible blends. Polymer, 1999, 40, 243-251.	3.8	52
27	Comparative XPS Study of Copper, Nickel, and Aluminum Coatings on Polymer Surfaces. Chemistry of Materials, 2003, 15, 965-973.	6.7	51
28	Preparation and properties of poly(valerolactone). Polymer, 1981, 22, 1223-1226.	3.8	49
29	Influence of the tacticity of poly(methyl methacrylate) on its miscibility with chlorinated polymers. Macromolecules, 1988, 21, 2148-2154.	4.8	49
30	Orientation and relaxation of orientation of amorphous poly(ethylene terephthalate). Polymer, 2001, 42, 9051-9058.	3.8	41
31	Tg-Composition analysis of miscible polymer blends. Polymer Engineering and Science, 1988, 28, 1355-1361.	3.1	39
32	Miscibility of polyester/nitrocellulose blends: A DSC and FTIR study. Journal of Polymer Science, Part B: Polymer Physics, 1988, 26, 1313-1329.	2.1	39
33	Study of the distribution of the molecular orientation in thick polyethylene samples by X-ray diffraction, infra-red dichroism and Raman spectroscopy. Polymer, 1993, 34, 5029-5037.	3.8	39
34	Studies of polylactone/poly(vinyl chloride), polylactone/poly(vinyl fluoride), and polylactone/poly(vinylidene fluoride) blends. Journal of Polymer Science, Polymer Physics Edition, 1981, 19, 1245-1253.	1.0	38
35	Crystallization of ultrathin poly(ε-caprolactone) films in the presence of residual solvent, an in situ atomic force microscopy study. Polymer, 2005, 46, 7255-7265.	3.8	38
36	FTIR of polycaprolactone/poly(vinylidene chloride-co-acrylonitrile) miscible blends. Journal of Polymer Science, Polymer Letters Edition, 1983, 21, 45-47.	0.4	37

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37	Study of polymer orientation and relaxation by polarization modulation and 2D-FTIR spectroscopy. Vibrational Spectroscopy, 1998, 18, 103-110.	2.2	37
38	$\hat{l}\pm\hat{-l}^2$ Transformation in Polypivalolactone. Macromolecules, 1974, 7, 541-545.	4.8	36
39	Stereocomplexation of isotactic polyesters of opposite configurations. Macromolecules, 1989, 22, 2438-2446.	4.8	36
40	Miscibility behaviour of PVC/polymeth-acrylate blends: temperature and composition analysis. Polymer, 1991, 32, 1468-1473.	3.8	36
41	Molecular Orientation and Relaxation of Poly(ethylene terephthalate) by Polarization Modulation Infrared Spectroscopy. Macromolecules, 2002, 35, 8768-8773.	4.8	36
42	Preparation and Properties of Optically Active Poly( $\hat{l}$ ±-methyl- $\hat{l}$ ±-n-propyl- $\hat{l}$ 2-propiolactone). Macromolecules, 1978, 11, 716-719.	4.8	34
43	Cooperativity in Backbone to Side-Chain Conformational Rearrangements in Stereoregular PMMA. Macromolecules, 1998, 31, 2545-2548.	4.8	33
44	Cracking in polylactide spherulites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3308-3315.	2.1	33
45	Thermodynamic study of poly(vinyl chloride)/polyester blends by inverse-phase gas chromatography at 120°C. Journal of Polymer Science, Part B: Polymer Physics, 1986, 24, 2565-2582.	2.1	31
46	Orientation and miscibility of poly( $\hat{l}\mu$ -caprolactone)/poly(styrene-co-acrylonitrile) mixtures. Polymer, 1994, 35, 3260-3267.	3.8	30
47	Morphologies of miscible PCL/PVC blends confined in ultrathin films. Polymer, 2014, 55, 2179-2187.	3.8	30
48	DSC and DMTA characterization of ternary blends. Polymer, 2002, 43, 2321-2328.	3.8	29
49	The determination of the thermodynamic interaction parameter? in polymer blends. Polymer Engineering and Science, 1984, 24, 1291-1299.	3.1	28
50	Infrared dichroism study of orientation and relaxation in miscible polymer blends containing a small amount of poly(2,6-dimethyl-1,4-phenylene oxide). Macromolecules, 1991, 24, 1261-1268.	4.8	28
51	Study of the Orientation of Poly(styrene)/Poly(vinyl methyl ether) Blends Relative to the Glass Transition Temperature. Macromolecules, 1994, 27, 5780-5786.	4.8	28
52	A study of aromatic polyester/chlorinated polymer blends. Polymer Engineering and Science, 1984, 24, 350-354.	3.1	27
53	Light scattering from assemblies of spherulites. Journal of Polymer Science Part A-2 Polymer Physics, 1973, 11, 1357-1374.	0.8	26
54	Dielectric properties of poly(?-methyl ?-n-propyl-?-propiolactone)/poly(vinyl chloride) blends. Polymer Engineering and Science, 1984, 24, 144-152.	3.1	26

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55	Orientation and relaxation study of polystyrene: Polystyrene/poly(phenylene oxide) blends. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 1405-1415.	2.1	26
56	Miscibility of caprolactone/ethylene terephthalate copolymers with chlorinated polymers: a differential scanning calorimetry and Fourier transform infra-red study. Polymer, 1990, 31, 917-923.	3.8	25
57	A nonradiative energy transfer fluorescence study: blends of poly(vinyl chloride) and poly(methyl) Tj ETQq1 1 0.	.784314 rg 4.8	BT /Qverlock
58	Preparation, characterization, and porperties of optically active poly(α-methyl-α-ethyl-β-propiolactones). Journal of Polymer Science: Polymer Chemistry Edition, 1981, 19, 1781-1793.	0.8	23
59	Characterization of the molecular orientation in highly oriented rolled polypropylene sheets by X-ray diffraction. Polymer, 1994, 35, 3927-3935.	3.8	23
60	XPS studies of Ni deposition on polymethyl methacrylate and poly(styrene-co-acrylonitrile). Polymers for Advanced Technologies, 2000, 11, 316-323.	3.2	23
61	Differences Between Stereocomplex Spherulites Obtained in Equimolar and Nonâ€Equimolar Poly( <scp>L</scp> â€lactide)/Poly( <scp>D</scp> â€lactide) Blends. Macromolecular Chemistry and Physics, 2011, 212, 691-698.	2.2	23
62	Scattering of light from thin polymer films. I. Multiple scattering. Journal of Polymer Science, Polymer Physics Edition, 1974, 12, 1955-1968.	1.0	22
63	Conformational analysis of substituted polyacetylenes. Journal of Polymer Science, Polymer Physics Edition, 1985, 23, 2021-2030.	1.0	22
64	Synthesis and polymerization of racemic and optically active $\hat{l}^2$ -substituted $\hat{l}^2$ -propiolactones. III. $\hat{l}^2$ -monosubstituted monomers and polymers. Journal of Polymer Science Part A, 1986, 24, 2773-2787.	2.3	22
65	Dual Growth Rates and Morphologies of Isothermally Crystallized Miscible Polymer Blends. Macromolecules, 2002, 35, 5338-5341.	4.8	22
66	X-ray photoelectron spectroscopy study of oxygen-containing polymer [poly(vinyl methyl ether), poly(vinyl methyl ketone), and poly(methyl methacrylate)] surfaces metalized by vacuum-deposited nickel. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 82-94.	2.1	21
67	Adsorption of stereoregular poly(methyl methacrylates) on ?-alumina: Spectroscopic analysis. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2985-2995.	2.1	20
68	Scattering from truncated spherulites. Journal of Polymer Science Part A-2 Polymer Physics, 1973, 11, 1683-1701.	0.8	19
69	A study of phase separation of crystalline and miscible polymer blends. Poly(É)-caprolactone)/poly(styrene-co-acrylonitrile). Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 719-727.	2.1	19
70	Morphology of fractured polymer surfaces self-bonded below the glass transition temperature. Mechanics of Composite Materials, 1998, 34, 473-482.	1.4	19
71	The adhesion of amorphous polystyrene surfaces below Tg. Polymer, 2003, 44, 7477-7484.	3.8	19
72	Deformation and Relaxation of Polymers Studied by Ultrarapid Scanning FT-IR Spectrometry. Macromolecules, 2003, 36, 4838-4843.	4.8	19

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73	Preparation and properties of poly (α-methyl-α-ethyl-β-propriolactone). Polymer, 1979, 20, 1199-1203.	3.8	18
74	Study of crystalline orientation in drawn ultra-high–molecular weight polyethylene films. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 255-264.	2.1	18
75	Crystallization behaviour of stereocomplexed poly(methyl methacrylates): influence of thermal history. Polymer, 1998, 39, 5453-5460.	3.8	18
76	X-ray and birefringence orientation measurements on uniaxially deformed polyethylene film. Polymer, 1993, 34, 4004-4014.	3.8	17
77	Mechanical properties developing at the interface of amorphous miscible polymers, below the glass transition temperature: Time-temperature superposition. Journal of Applied Polymer Science, 1999, 74, 825-830.	2.6	17
78	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
79	Orientation and Relaxation in Thick Poly(ethylene Terephthalate) Films by Transmission Infrared Linear Dichroism. Applied Spectroscopy, 2002, 56, 17-23.	2.2	16
80	The scattering of light from thin polymer films: Multiple scattering. II. Effect of depolarization. Journal of Polymer Science, Polymer Physics Edition, 1976, 14, 1541-1552.	1.0	15
81	Dégradation thermique de mélanges miscibles et immiscibles polyester/polychlorure de vinyle. European Polymer Journal, 1986, 22, 529-536.	5.4	14
82	Study of segmental orientation in poly (vinyl chloride)/poly (α-methyl-α-n-propyl-β-propiolactone) blends by fourier-transform infrared spectroscopy. Journal of Polymer Science, Part B: Polymer Physics, 1990, 28, 1283-1296.	2.1	14
83	Study of orientation in polystyrene/poly(vinyl methyl ether) relative to the temperature of phase separation. Polymer, 1993, 34, 4661-4668.	3.8	14
84	Molecular modelling of the uniaxial deformation of amorphous polyethylene terephthalate. Polymer, 2004, 45, 1401-1411.	3.8	14
85	Comparison of Molecular Orientation in Ionomer-Related Polystyrene-Based Copolymers and Blends. Macromolecules, 1995, 28, 897-903.	4.8	13
86	Physical Characterization of Blends of Poly(d-lactide) and LHRH (A Leuprolide Decapeptide Analog). Biomacromolecules, 2005, 6, 3112-3118.	5.4	13
87	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
88	Infrared and fluorescence spectroscopy investigation of the orientation of two fluorophores in stretched polymer films. Polymer, 2013, 54, 730-736.	3.8	13
89	The effect of size, truncation and disorder in optic axes on the small angle light scattering patterns. European Polymer Journal, 1977, 13, 365-368.	5.4	12
90	Les melanges polyester/poly(bromure de vinyle). European Polymer Journal, 1982, 18, 957-962.	5.4	12

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91	Thermodynamics of miscible polymer blends using a concentration-dependent χ parameter. Journal of Polymer Science, Part B: Polymer Physics, 1988, 26, 1769-1780.	2.1	12
92	Lamellar and spherulitic crystallization of poly(s-2-hydroxybutanoic acid) and its stereocomplexes. Polymer, 2017, 112, 377-384.	3.8	12
93	La fusion et la cristallisation de la poly $(\hat{l}\pm,\hat{l}\pm$ -di $\hat{A}$ ©thyl- $\hat{l}^2$ -propiolactone): Comparaison avec d'autres polylactones. Die Makromolekulare Chemie, 1979, 180, 769-783.	1.1	11
94	Crystallization of polydioxolan. III. Microscopy and dilatometric analysis of the crystallization kinetics. Journal of Polymer Science, Polymer Physics Edition, 1980, 18, 35-50.	1.0	11
95	Solid state characterization of poly(ethylene oxide)/poly(acrylic acid) complexes. Die Makromolekulare Chemie Rapid Communications, 1984, 5, 419-422.	1.1	11
96	A study of polymer blends by nonradiative energy transfer fluorescence spectroscopy. Journal of Polymer Science, Part B: Polymer Physics, 1989, 27, 1955-1970.	2.1	11
97	An x-ray pole figure analysis on biaxially deformed polyethylene film. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 1475-1484.	2.1	11
98	Effect of thermal history on the molecular orientation in polystyrene/poly(vinyl methyl ether) blends. Polymer, 2003, 44, 3291-3297.	3.8	11
99	Crystallization of polydioxolan. II. Morphology and melting properties. Journal of Polymer Science, Polymer Physics Edition, 1977, 15, 1619-1626.	1.0	10
100	Infrared dichroic study of orientation using ionomers. Macromolecules, 1989, 22, 3788-3793.	4.8	10
101	A nonradiative energy transfer fluorescence spectroscopy study of poly(vinyl chloride)/poly(methyl) Tj ETQq1 1 0.	7 <u>84</u> 314 rg	gBT/Overloc
102	Orientation of miscible and immiscible polymer blends. Polymer Engineering and Science, 1992, 32, 1857-1862.	3.1	10
103	Morphology of Fractured Polymerâ€Polymer Interfaces Bonded at Ambient Temperature as Studied by Atomic Force Microscopy. Journal of Macromolecular Science - Physics, 2005, 44, 413-420.	1.0	10
104	Influence of thermal stabilizers on diffusion of poly(?-caprolactone) in poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10	Tf 50 222	Tg (chloride)
105	Study of orientation in miscible and heterogeneous poly(styrene)/poly(vinyl methyl ether) blends. Polymer, 1996, 37, 3805-3811.	3.8	9
106	Miscibility behavior of di(ethyl-2 hexyl) phthalate in binary and ternary chlorinated polymer blends. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 615-624.	2.1	8
107	Fractionation in mixtures of polyethylene oxide fractions during crystallization. Journal of Polymer Science, Polymer Physics Edition, 1982, 20, 307-317.	1.0	7
108	On the calculation of ã€^Pn(cosχ)〉 coefficients from X-ray diffraction measurements made on hkl reflections. Polymer, 1996, 37, 1509-1512.	3.8	7

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109	The alpha–beta transformation in polypivalolactone. II. A simple mechanical model. Journal of Polymer Science, Polymer Physics Edition, 1974, 12, 2455-2463.	1.0	6
110	Partial miscibility of cellulose–polyacrylonitrile blends. Journal of Applied Polymer Science, 1979, 23, 1943-1949.	2.6	6
111	Synthesis and polymerization of racemic and optically active substituted $\hat{l}^2$ -propiolactones. VI. $\hat{l}_{\pm}$ -Phenyl $\hat{l}^2$ -propiolactone. Journal of Polymer Science Part A, 1991, 29, 1281-1291.	2.3	6
112	Conformational and Packing Modeling of Optically Active Polyesters. 2. Helical Structure of an Isotactic Polylactone. Macromolecules, 1999, 32, 7655-7665.	4.8	6
113	Stereocomplex formation between enantiomeric poly(αâ€methylâ€Î±â€ethylâ€Î²â€propiolactones): Effect of molecular weight. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2380-2389.	2.1	6
114	Dielectric relaxation measurements of polypivalolactone. Journal of Macromolecular Science - Physics, 1984, 23, 323-340.	1.0	5
115	Theoretical analysis of model compounds of substituted poly(acetylenes): conformation versus electronic properties. Polymer Bulletin, 1987, 18, 159.	3.3	5
116	Time-resolved small-angle light scattering for the study of phase separation kinetics in bisphenol-a polycarbonate/poly(methy methacrylate) blends. Polymer Engineering and Science, 1995, 35, 34-40.	3.1	5
117	X-ray photoelectron spectroscopy of miscible poly(methyl methacrylate)/poly(styrene-co) Tj ETQq1 1 0.784314 rg metallized by nickel. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 1408-1416.	gBT /Overlo 2.1	ock 10 Tf 50 5
118	Crystallization and morphology of ultrathin films of poly(d-lactide) with BAB block copolymers in which the A block is made of poly(l-lactide). Polymer, 2017, 117, 25-29.	3.8	5
119	Small-angle light scattering from thin polymer films: Multiple scattering from samples with rodlike morphology. Journal of Polymer Science, Polymer Physics Edition, 1977, 15, 1613-1618.	1.0	4
120	Dynamic Melt Rheology of Polyethylene—lonomer Blends. ACS Symposium Series, 1989, , 211-228.	0.5	4
121	Properties of polyacrylonitrile–cellulose blends. Journal of Applied Polymer Science, 1979, 24, 887-890.	2.6	3
122	Determination of optical purity of substituted î²-lactones. Polymer Bulletin, 1993, 30, 223-228.	3.3	3
123	Synthesis and Characterization of Racemic and Isotactic Poly( $\hat{l}^2$ -alkyl- $\hat{l}^2$ -propiolactone)s. Macromolecules, 1998, 31, 3478-3488.	4.8	3
124	Dynamic light-scattering study of an ethylene–methacrylic acid copolymer and its salt. Journal of Polymer Science Part A-2 Polymer Physics, 1973, 11, 1347-1355.	0.8	2
125	Investigation of polymer blend miscibility using excimer fluorescence. Polymer, 1991, 32, 791-795.	3.8	2
126	Interdiffusion and adhesion at the inteface of a polystyrene-poly(2,6-dimethyl-1,4-phenylene oxide) blend below the glass transition temperature. Mechanics of Composite Materials, 1999, 35, 441-446.	1.4	2

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127	Physical properties of polyesters prepared from Î²â€łactones. Makromolekulare Chemie Macromolecular Symposia, 1986, 6, 189-199.	0.6	1
128	Fourier transform infrared study of segmental orientation in polymer blends. Mikrochimica Acta, 1988, 94, 283-286.	5.0	1
129	Molecular conformation of optically active polyesters and their stereocomplexes. Makromolekulare Chemie Macromolecular Symposia, 1993, 73, 203-215.	0.6	1
130	Kinetics of isomerization and doping of poly(t-butyl-acetylene). Polymer Bulletin, 1986, 16, 7-12.	3.3	0
131	The transition moment angle of the v CN vibration in SAN copolymers. Polymer Bulletin, 1994, 32, 223-227.	3.3	0