

# Albert F Yee

## List of Publications by Year in descending order

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124  
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10,077  
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34105

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128  
docs citations

128  
times ranked

7613  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanopattern-induced changes in morphology and motility of smooth muscle cells. <i>Biomaterials</i> , 2005, 26, 5405-5413.	11.4	592
2	Interface and Surface Effects on the Glass Transition in Thin Polystyrene Films. <i>Physical Review Letters</i> , 1997, 78, 1524-1527.	7.8	531
3	Epoxy Nanocomposites with Highly Exfoliated Clay: Mechanical Properties and Fracture Mechanisms. <i>Macromolecules</i> , 2005, 38, 788-800.	4.8	511
4	Organic/Inorganic Hybrid Composites from Cubic Silsesquioxanes. <i>Journal of the American Chemical Society</i> , 2001, 123, 11420-11430.	13.7	460
5	Highly Porous Polyhedral Silsesquioxane Polymers. Synthesis and Characterization. <i>Journal of the American Chemical Society</i> , 1998, 120, 8380-8391.	13.7	373
6	Toughening mechanisms in thermoplastic-modified epoxies: 1. Modification using poly(phenylene) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	3.8	334
7	Determination of Pore Size in Mesoporous Thin Films from the Annihilation Lifetime of Positronium. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4657-4662.	2.6	266
8	Positronium annihilation in mesoporous thin films. <i>Physical Review B</i> , 1999, 60, R5157-R5160.	3.2	260
9	Organic/Inorganic Hybrid Composites from Cubic Silsesquioxanes. Epoxy Resins of Octa(dimethylsiloxyethylcyclohexylepoxy) Silsesquioxane. <i>Macromolecules</i> , 2003, 36, 5666-5682.	4.8	257
10	Molecular structure effects on the dynamic mechanical spectra of polycarbonates. <i>Macromolecules</i> , 1981, 14, 54-64.	4.8	247
11	A discussion of the molecular mechanisms of moisture transport in epoxy resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 792-802.	2.1	243
12	Constitutive modeling of polymeric foam material subjected to dynamic crash loading. <i>International Journal of Impact Engineering</i> , 1998, 21, 369-386.	5.0	237
13	Nanopatterned polymer surfaces with bactericidal properties. <i>Biointerphases</i> , 2015, 10, 021010.	1.6	219
14	Effect of temperature on moisture absorption in a bismaleimide resin and its carbon fiber composites. <i>Polymer</i> , 2002, 43, 3987-3997.	3.8	205
15	Toughening mechanisms in core-shell rubber modified polycarbonate. <i>Polymer</i> , 1990, 31, 2267-2277.	3.8	204
16	Determination of pore-size distribution in low-dielectric thin films. <i>Applied Physics Letters</i> , 2000, 76, 1282-1284.	3.3	188
17	Contributions of the nanovoid structure to the moisture absorption properties of epoxy resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 3035-3048.	2.1	173
18	Toughening of Cubic Silsesquioxane Epoxy Nanocomposites Using Core-Shell Rubber Particles: A Three-Component Hybrid System. <i>Macromolecules</i> , 2004, 37, 3267-3276.	4.8	153

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19	Positronium Formation as a Probe of Polymer Surfaces and Thin Films. <i>Physical Review Letters</i> , 1995, 74, 4947-4950.	7.8	145
20	Fracture of glass bead/epoxy composites: on micro-mechanical deformations. <i>Polymer</i> , 2000, 41, 8363-8373.	3.8	145
21	Mechanical properties of mixtures of two compatible polymers. <i>Polymer Engineering and Science</i> , 1977, 17, 213-219.	3.1	143
22	Moisture diffusion and hygrothermal aging in bismaleimide matrix carbon fiber composites—part I: uni-weave composites. <i>Composites Science and Technology</i> , 2002, 62, 2099-2110.	7.8	143
23	Contributions of the nanovoid structure to the kinetics of moisture transport in epoxy resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 776-791.	2.1	139
24	Moisture absorption and hygrothermal aging in a bismaleimide resin. <i>Polymer</i> , 2001, 42, 7327-7333.	3.8	135
25	Inorganic particle toughening I: micro-mechanical deformations in the fracture of glass bead filled epoxies. <i>Polymer</i> , 2001, 42, 577-588.	3.8	132
26	Toughening mechanisms in a multi-phase alloy of nylon 6,6/polyphenylene oxide. <i>Journal of Materials Science</i> , 1989, 24, 1447-1457.	3.7	123
27	Inorganic particle toughening II: toughening mechanisms of glass bead filled epoxies. <i>Polymer</i> , 2001, 42, 589-597.	3.8	120
28	The Molecular Basis for the Relationship between the Secondary Relaxation and Mechanical Properties of a Series of Polyester Copolymer Glasses. <i>Macromolecules</i> , 1999, 32, 5944-5955.	4.8	116
29	Measurement of Hole Volume in Amorphous Polymers Using Positron Spectroscopy. <i>Macromolecules</i> , 1996, 29, 8507-8516.	4.8	111
30	Secondary relaxation motion in bisphenol A polycarbonate. <i>Macromolecules</i> , 1991, 24, 1905-1913.	4.8	108
31	Molecular Structure Effects on the Secondary Relaxation and Impact Strength of a Series of Polyester Copolymer Glasses. <i>Macromolecules</i> , 1998, 31, 5371-5382.	4.8	98
32	Moisture diffusion and hygrothermal aging in bismaleimide matrix carbon fiber composites: part II—woven and hybrid composites. <i>Composites Science and Technology</i> , 2002, 62, 2111-2119.	7.8	94
33	A method of forming composite structures using in situ-formed liquid crystal polymer fibers in a thermoplastic matrix. <i>Polymer Composites</i> , 1990, 11, 10-18.	4.6	87
34	Correlation of Positron Annihilation and Other Dynamic Properties in Small Molecule Glass-Forming Substances. <i>Physical Review Letters</i> , 2001, 87, 215901.	7.8	82
35	Proton spin relaxation and molecular motion in a bulk polycarbonate. <i>Macromolecules</i> , 1983, 16, 658-665.	4.8	79
36	Antiplasticization effects on a secondary relaxation in plasticized glassy polycarbonates. <i>Macromolecules</i> , 1991, 24, 61-67.	4.8	79

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37	Effect of drawing on structure and properties of a liquid crystalline polymer and polycarbonate-in-situ composite. <i>Polymer Engineering and Science</i> , 1993, 33, 789-798.	3.1	77
38	The effect of strain rate on the toughening mechanisms of rubber-modified plastics. <i>Polymer Engineering and Science</i> , 1981, 21, 205-211.	3.1	71
39	Strain and temperature accelerated relaxation in polycarbonate. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1988, 26, 2463-2483.	2.1	71
40	Mode II fracture of composites interlayered with nylon particles. <i>Composites Science and Technology</i> , 1996, 56, 1223-1240.	7.8	71
41	Role of inherent matrix toughness on fracture of glass bead filled epoxies. <i>Polymer</i> , 2000, 41, 8375-8385.	3.8	70
42	Microdeformation and Fracture Mechanisms in Polyamide-6/Organoclay Nanocomposites. <i>Macromolecules</i> , 2008, 41, 193-202.	4.8	70
43	Dynamic bulk and shear relaxation in glassy polymers. I. Experimental techniques and results on PMMA. <i>Journal of Polymer Science, Polymer Physics Edition</i> , 1982, 20, 205-224.	1.0	68
44	Correlation between the Shear Yielding Behavior and Secondary Relaxations of Bisphenol A Polycarbonate and Related Copolymers. <i>Macromolecules</i> , 1994, 27, 2761-2768.	4.8	67
45	Mechanical properties of polymer mixtures: Effect of compatibility. <i>Journal of Macromolecular Science - Physics</i> , 1980, 17, 543-564.	1.0	65
46	Evolution of nanometer voids in polycarbonate under mechanical stress and thermal expansion using positron spectroscopy. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1995, 33, 77-84.	2.1	64
47	Phase transformations of a liquid crystalline epoxy during curing. <i>Polymer</i> , 1994, 35, 2679-2682.	3.8	63
48	The preparation and morphology of PPO-epoxy blends. <i>Journal of Applied Polymer Science</i> , 1993, 48, 1051-1060.	2.6	61
49	Interfacial adhesion and toughening mechanisms in an alloy of polycarbonate/polyethylene. <i>Polymer</i> , 1992, 33, 4868-4871.	3.8	59
50	Probing diffusion barrier integrity on porous silica low-k thin films using positron annihilation lifetime spectroscopy. <i>Journal of Applied Physics</i> , 2001, 89, 5138-5144.	2.5	59
51	Expression of Oct4 in human embryonic stem cells is dependent on nanotopographical configuration. <i>Acta Biomaterialia</i> , 2013, 9, 6369-6380.	8.3	58
52	Enhancing Plastic Yielding in Polyestercarbonate Glasses by 1,4-Cyclohexylene Linkage Addition. <i>Macromolecules</i> , 1998, 31, 7865-7870.	4.8	57
53	Fracture toughness and fracture mechanisms of polybutylene-terephthalate/polycarbonate/impact-modifier blends. <i>Journal of Materials Science</i> , 1994, 29, 4510-4522.	3.7	52
54	Collagen density modulates triple-negative breast cancer cell metabolism through adhesion-mediated contractility. <i>Scientific Reports</i> , 2018, 8, 17094.	3.3	51

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55	Extended ensemble molecular dynamics method for constant strain rate uniaxial deformation of polymer systems. <i>Journal of Chemical Physics</i> , 1997, 107, 4396-4407.	3.0	50
56	Evolution of structure and properties of a liquid crystalline epoxy during curing. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1997, 35, 2363-2378.	2.1	41
57	Effects of rate on crack growth in a rubber-modified epoxy. <i>Acta Materialia</i> , 2000, 48, 3581-3592.	7.9	39
58	Fracture behavior of glass bead filled epoxies: Cleaning process of glass beads. <i>Journal of Applied Polymer Science</i> , 2001, 79, 1371-1383.	2.6	39
59	Correlation of focal adhesion assembly and disassembly with cell migration on nanotopography. <i>Integrative Biology (United Kingdom)</i> , 2017, 9, 145-155.	1.3	39
60	Scale of cooperative $\beta$ -relaxation of bisphenol A polycarbonate. <i>Macromolecules</i> , 1992, 25, 6800-6809.	4.8	38
61	Nonlinear viscoelasticity and yield: Application of a coupling model. <i>Polymer Engineering and Science</i> , 1987, 27, 2-15.	3.1	37
62	Influence of cyclic fatigue on the mechanical properties of amorphous polycarbonate. <i>Polymer</i> , 1995, 36, 759-765.	3.8	37
63	Local molecular motions in glassy and dissolved polycarbonates. <i>Macromolecules</i> , 1988, 21, 3396-3401.	4.8	36
64	Molecular dynamics study of isobaric and isochoric glass transitions in a model amorphous polymer. <i>Journal of Chemical Physics</i> , 1999, 110, 7058-7069.	3.0	36
65	The biaxial deformation and yield behavior of bisphenol-a polycarbonate: Effect of anisotropy. <i>Polymer Engineering and Science</i> , 1986, 26, 920-930.	3.1	35
66	Pore Sealing by $\text{NH}_3$ Plasma Treatment of Porous Low Dielectric Constant Films. <i>Journal of the Electrochemical Society</i> , 2007, 154, G85.	2.9	33
67	Development of a process zone in rubber-modified epoxy polymers. <i>International Journal of Fracture</i> , 1998, 92, 271-286.	2.2	32
68	Effect of Local Conformational Transition on Craze Initiation in Polyestercarbonates Containing Cyclohexylene Linkages. <i>Macromolecules</i> , 2000, 33, 1338-1344.	4.8	31
69	Mechanical properties of in situ composites based on polycarbonate and a liquid crystalline polymer. <i>Polymer</i> , 1994, 35, 3463-3469.	3.8	30
70	Micromechanical modeling of crack-tip rubber particle cavitation process in polymer toughening. <i>Polymer Engineering and Science</i> , 1996, 36, 2320-2326.	3.1	30
71	Deformation behaviour of a polycarbonate plate with a circular hole: finite elements model and experimental observations. <i>Polymer</i> , 1988, 29, 1619-1624.	3.8	29
72	Positronium formation in semicrystalline poly(ethylene terephthalate). <i>Polymer</i> , 1994, 35, 14-17.	3.8	29

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73	Changes of the hole volume in model epoxy networks. <i>Polymer</i> , 1995, 36, 3997-4003.	3.8	29
74	Effect of rubber interlayers on the fracture of glass bead/epoxy composites. <i>Journal of Materials Science</i> , 2001, 36, 7-20.	3.7	28
75	Design of Mechanically Robust High-Tg Polymers: Mechanical Properties of Glassy Poly(ester) Tj ETQq1 1 0.784314 rgBT /Overlo	4.8	27
76	Relaxation Kinetics of Nanostructures on Polymer Surface: Effect of Stress, Chain Mobility, and Spatial Confinement. <i>Macromolecules</i> , 2010, 43, 409-417.	4.8	27
77	Mechanical modeling of initiation of localized yielding under plane stress conditions in rigid-rigid polymer alloys. <i>Polymer Engineering and Science</i> , 1991, 31, 793-802.	3.1	26
78	Elastic modulus of in-situ composites of a liquid crystalline polymer and polycarbonate. <i>Polymer Composites</i> , 1994, 15, 156-162.	4.6	25
79	Micro-mechanical deformation mechanisms in the fracture of hybrid-particulate composites based on glass beads, rubber and epoxies. <i>Polymer Engineering and Science</i> , 2000, 40, 2457-2470.	3.1	25
80	Some connections between viscoelastic properties of PVC and plasticized PVC and molecular kinetics. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1991, 29, 1493-1501.	2.1	24
81	Effect of cyclic stress on structural changes in polycarbonate as probed by positron annihilation lifetime spectroscopy. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1992, 30, 231-238.	2.1	24
82	A Dielectric Relaxation Study of the $\hat{I}^3$ -Relaxation in Tetramethylbisphenol A Polycarbonate Plasticized by Tris(2-ethylhexyl) Phosphate. <i>Macromolecules</i> , 1999, 32, 7921-7924.	4.8	24
83	Design of Mechanically Robust High-Tg Polymers: Physical Properties of Glassy Poly(ester carbonate)s with Cyclohexylene Rings in the Backbone. <i>Macromolecules</i> , 2003, 36, 9421-9429.	4.8	24
84	The effect of physical aging on the dissolution rate of anionic polyelectrolytes. <i>Pharmaceutical Research</i> , 1990, 07, 648-653.	3.5	23
85	Effect of cyclic stress on enthalpy relaxation in polycarbonate. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1992, 30, 221-230.	2.1	23
86	Preparation and characterization of maleimide-terminated poly(arylene ether sulfone) oligomers of various molecular weights. <i>Journal of Applied Polymer Science</i> , 1991, 43, 1849-1858.	2.6	22
87	Fatigue craze initiation in polycarbonate: study by transmission electron microscopy. <i>Polymer</i> , 1994, 35, 3604-3611.	3.8	22
88	Temperature-Dependent Transition of Deformation Mode in Poly(1,4-cyclohexylenedimethylene) Tj ETQq0 0 0 rgBT /Overlock_10 Tf 50 1	4.8	22
89	Bundle Description of Packing and Dynamics in Polycarbonate Homopolymers, Copolymers, and Blends. <i>Macromolecules</i> , 1998, 31, 3016-3020.	4.8	20
90	Design of Mechanically Robust High-Tg Polymers: Synthesis and Dynamic Mechanical Relaxation Behavior of Glassy Poly(ester carbonate)s with Cyclohexylene Rings in the Backbone. <i>Macromolecules</i> , 2003, 36, 9411-9420.	4.8	20

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91	Controlling molecular mobility and ductile-brittle transitions of polycarbonate copolymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1730-1740.	2.1	18
92	Fatigue craze initiation in polycarbonate: study by small-angle X-ray scattering. <i>Polymer</i> , 1994, 35, 4287-4292.	3.8	17
93	Local Chain Dynamics in Poly(fluorocarbonate)s. <i>Macromolecules</i> , 2000, 33, 6849-6852.	4.8	17
94	Nanopillared Surfaces Disrupt <i>Pseudomonas aeruginosa</i> Mechanoresponsive Upstream Motility. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 10532-10539.	8.0	17
95	Chain Packing and Dynamics in Polycarbonate Block Copolymers. <i>Macromolecules</i> , 1997, 30, 6302-6306.	4.8	16
96	Two-dimensional transferred-echo double resonance study of molecular motion in a fluorinated polycarbonate. <i>Solid State Nuclear Magnetic Resonance</i> , 1998, 12, 87-95.	2.3	16
97	Prediction of physical aging in controlled-release coatings: the application of the relaxation coupling model to glassy cellulose acetate. <i>Pharmaceutical Research</i> , 1991, 08, 698-705.	3.5	15
98	Correlations of the Boson Peak with Positron Annihilation in Series of Polycarbonate Copolymers. <i>Macromolecules</i> , 2001, 34, 4082-4088.	4.8	14
99	Synergistic Antimicrobial Activity of a Nanopillar Surface on a Chitosan Hydrogel. <i>ACS Applied Bio Materials</i> , 2020, 3, 8040-8048.	4.6	13
100	Contributions of the nanovoid structure to the kinetics of moisture transport in epoxy resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 776.	2.1	13
101	The effect of sudden strain-rate change on the yield behavior of bisphenol-A polycarbonate. <i>Polymer Engineering and Science</i> , 1974, 14, 691-695.	3.1	12
102	Interactions of a liquid crystalline polymer with polycarbonate and poly(ethylene terephthalate). <i>Journal of Materials Science</i> , 1997, 32, 3961-3970.	3.7	12
103	Importance of Sub-Nanosecond Fluctuations on the Toughness of Polycarbonate Glasses. <i>Macromolecules</i> , 2020, 53, 6672-6681.	4.8	12
104	Why Enhanced Subnanosecond Relaxations Are Important for Toughness in Polymer Glasses. <i>Macromolecules</i> , 2021, 54, 2518-2528.	4.8	12
105	Effect of the Scale of Local Segmental Motion on Nanovoid Growth in Polyester Copolymer Glasses. <i>Macromolecules</i> , 2003, 36, 2793-2801.	4.8	11
106	Biomimetic Nanopillared Surfaces Inhibit Drug Resistant Filamentous Fungal Growth. <i>ACS Applied Bio Materials</i> , 2019, 2, 3159-3163.	4.6	11
107	Curing reaction and product properties of polysulfones terminated with active functional groups. <i>Journal of Applied Polymer Science</i> , 1991, 43, 1865-1874.	2.6	8
108	Effect of Linkage Groups on Motional Cooperativity in the Secondary Relaxations of Some Glassy Polymers. <i>Macromolecules</i> , 2002, 35, 425-432.	4.8	8

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109	Syntheses of alternating multiblock copolycarbonates with controlled block lengths. <i>Macromolecules</i> , 1991, 24, 1590-1594.	4.8	6
110	Characterization of Absorbed Water in Perdeuterated Polycarbonate by Residual-Proton NMR. <i>Macromolecules</i> , 1995, 28, 6477-6480.	4.8	6
111	Effect of the Local Motions of Chemical Linkages on Segmental Mobility in Poly(ester carbonate) Block Copolymers. <i>Macromolecules</i> , 2001, 34, 2559-2568.	4.8	6
112	Structural changes in glassy polycarbonate induced by cyclic stresses. <i>Journal of Non-Crystalline Solids</i> , 1991, 131-133, 492-496.	3.1	5
113	Stress Evolution during Thermoset Cure. <i>Materials Research Society Symposia Proceedings</i> , 1998, 515, 195.	0.1	5
114	Local Chain Dynamics in Poly(ester carbonate)s. <i>Macromolecules</i> , 2000, 33, 6853-6855.	4.8	5
115	Conformal reversal imprint lithography for polymer nanostructuring over large curved geometries. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, 021602.	1.2	5
116	Nanopillar Templating Augments the Stiffness and Strength in Biopolymer Films. <i>ACS Nano</i> , 2022, 16, 3311-3322.	14.6	5
117	Nanovoid relaxation in a series of copolyester glasses under cyclic loading using synchronous PALS. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2007, 45, 1410-1417.	2.1	3
118	Probing near-surface nanoscale mechanical properties of low modulus materials using a quartz crystal resonator atomic force microscope. <i>Nanotechnology</i> , 2011, 22, 295709.	2.6	3
119	Toughening mechanisms in a multi-phase alloy of nylon 6,6/polyphenylene oxide. <i>Journal of Materials Science</i> , 1989, 24, 1447-1457.	3.7	3
120	Metabolism Modulation of Cancer Cells on Varying Substrate Stiffnesses. <i>Biophysical Journal</i> , 2018, 114, 19a.	0.5	1
121	Contributions of the nanovoid structure to the moisture absorption properties of epoxy resins. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 3035-3048.	2.1	1
122	Fracture behavior of glass bead filled epoxies: Cleaning process of glass beads. <i>Journal of Applied Polymer Science</i> , 2001, 79, 1371-1383.	2.6	1
123	Structural Changes in Glassy Polycarbonate Due to Cyclic Loading. <i>Materials Research Society Symposia Proceedings</i> , 1990, 215, 61.	0.1	0
124	Focal Adhesion Formation and Reorganization on Nanopatterned Surfaces. <i>Biophysical Journal</i> , 2016, 110, 133a.	0.5	0