Albert F Yee

List of Publications by Year in Descending Order

124 papers	8,862 citations	50 h-index	93 g-index
128 ext. papers	9,339 ext. citations	4.6 avg, IF	5.79 L-index

#	Paper	IF	Citations
124	Nanopillar Templating Augments the Stiffness and Strength in Biopolymer Films.. *ACS Nano*, **2022**,	16.7	1
123	Why Enhanced Subnanosecond Relaxations Are Important for Toughness in Polymer Glasses. *Macromolecules*, **2021**, 54, 2518-2528	5.5	4
122	Importance of Sub-Nanosecond Fluctuations on the Toughness of Polycarbonate Glasses. *Macromolecules*, **2020**, 53, 6672-6681	5.5	4
121	Synergistic Antimicrobial Activity of a Nanopillar Surface on a Chitosan Hydrogel.. *ACS Applied Bio Materials*, **2020**, 3, 8040-8048	4.1	3
120	Nanopillared Surfaces Disrupt Pseudomonas aeruginosa Mechanoresponsive Upstream Motility. *ACS Applied Materials & Interfaces*, **2019**, 11, 10532-10539	9.5	11
119	Biomimetic Nanopillared Surfaces Inhibit Drug Resistant Filamentous Fungal Growth.. *ACS Applied Bio Materials*, **2019**, 2, 3159-3163	4.1	6
118	Collagen density modulates triple-negative breast cancer cell metabolism through adhesion-mediated contractility. *Scientific Reports*, **2018**, 8, 17094	4.9	35
117	Conformal reversal imprint lithography for polymer nanostructuring over large curved geometries. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2017**, 35, 021602	1.3	4
116	Correlation of focal adhesion assembly and disassembly with cell migration on nanotopography. *Integrative Biology (United Kingdom)*, **2017**, 9, 145-155	3.7	30
115	Nanopatterned polymer surfaces with bactericidal properties. *Biointerphases*, **2015**, 10, 021010	1.8	175
114	Expression of Oct4 in human embryonic stem cells is dependent on nanotopographical configuration. *Acta Biomaterialia*, **2013**, 9, 6369-80	10.8	53
113	Probing near-surface nanoscale mechanical properties of low modulus materials using a quartz crystal resonator atomic force microscope. *Nanotechnology*, **2011**, 22, 295709	3.4	3
112	Relaxation Kinetics of Nanostructures on Polymer Surface: Effect of Stress, Chain Mobility, and Spatial Confinement. *Macromolecules*, **2010**, 43, 409-417	5.5	25
111	Microdeformation and Fracture Mechanisms in Polyamide-6/Organoclay Nanocomposites. *Macromolecules*, **2008**, 41, 193-202	5.5	59
110	Nanovoid relaxation in a series of copolyester glasses under cyclic loading using synchronous PALS. *Journal of Polymer Science, Part B: Polymer Physics*, **2007**, 45, 1410-1417	2.6	3
109	Pore Sealing by NH[sub 3] Plasma Treatment of Porous Low Dielectric Constant Films. *Journal of the Electrochemical Society*, **2007**, 154, G85	3.9	31
108	Crazing and Fracture of Polymers **2006**,		4

107	Epoxy Nanocomposites with Highly Exfoliated Clay: Mechanical Properties and Fracture Mechanisms. *Macromolecules*, **2005**, 38, 788-800	5.5	470
106	Nanopattern-induced changes in morphology and motility of smooth muscle cells. *Biomaterials*, **2005**, 26, 5405-13	15.6	537
105	Toughening of Cubic Silsesquioxane Epoxy Nanocomposites Using Core–Shell Rubber Particles: A Three-Component Hybrid System. *Macromolecules*, **2004**, 37, 3267-3276	5.5	144
104	Design of Mechanically Robust High-Tg Polymers: Mechanical Properties of Glassy Poly(ester carbonate)s with Cyclohexylene Rings in the Backbone. *Macromolecules*, **2004**, 37, 7231-7239	5.5	22
103	Organic/Inorganic Hybrid Composites from Cubic Silsesquioxanes. Epoxy Resins of Octa(dimethylsiloxyethylcyclohexylepoxide) Silsesquioxane. *Macromolecules*, **2003**, 36, 5666-5682	5.5	246
102	Temperature-Dependent Transition of Deformation Mode in Poly(1,4-cyclohexylenedimethylene terephthalate)/Poly(ethylene terephthalate) Copolymers. *Macromolecules*, **2003**, 36, 6791-6796	5.5	21
101	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. *Macromolecules*, **2003**, 36, 9411-9420	5.5	18
100	Effect of the Scale of Local Segmental Motion on Nanovoid Growth in Polyester Copolymer Glasses. *Macromolecules*, **2003**, 36, 2793-2801	5.5	8
99	Design of Mechanically Robust High-Tg Polymers: Physical Properties of Glassy Poly(ester carbonate)s with Cyclohexylene Rings in the Backbone. *Macromolecules*, **2003**, 36, 9421-9429	5.5	21
98	Moisture diffusion and hygrothermal aging in bismaleimide matrix carbon fiber composites: part I: uni-weave composites. *Composites Science and Technology*, **2002**, 62, 2099-2110	8.6	113
97	Moisture diffusion and hygrothermal aging in bismaleimide matrix carbon fiber composites: part II: woven and hybrid composites. *Composites Science and Technology*, **2002**, 62, 2111-2119	8.6	76
96	Effect of temperature on moisture absorption in a bismaleimide resin and its carbon fiber composites. *Polymer*, **2002**, 43, 3987-3997	3.9	163
95	Impact Resistance **2002**,		4
94	Effect of Linkage Groups on Motional Cooperativity in the Secondary Relaxations of Some Glassy Polymers. *Macromolecules*, **2002**, 35, 425-432	5.5	8
93	Inorganic particle toughening I: micro-mechanical deformations in the fracture of glass bead filled epoxies. *Polymer*, **2001**, 42, 577-588	3.9	121
92	Inorganic particle toughening II: toughening mechanisms of glass bead filled epoxies. *Polymer*, **2001**, 42, 589-597	3.9	107
91	Moisture absorption and hygrothermal aging in a bismaleimide resin. *Polymer*, **2001**, 42, 7327-7333	3.9	106
90	Controlling molecular mobility and ductile–brittle transitions of polycarbonate copolymers. *Journal of Polymer Science, Part B: Polymer Physics*, **2001**, 39, 1730-1740	2.6	17

89	Fracture behavior of glass bead filled epoxies: Cleaning process of glass beads. *Journal of Applied Polymer Science*, **2001**, 79, 1371-1383	2.9	36
88	Effect of rubber interlayers on the fracture of glass bead/epoxy composites. *Journal of Materials Science*, **2001**, 36, 7-20	4.3	20
87	Probing diffusion barrier integrity on porous silica low-k thin films using positron annihilation lifetime spectroscopy. *Journal of Applied Physics*, **2001**, 89, 5138-5144	2.5	57
86	Organic/inorganic hybrid composites from cubic silsesquioxanes. *Journal of the American Chemical Society*, **2001**, 123, 11420-30	16.4	438
85	Correlations of the Boson Peak with Positron Annihilation in Series of Polycarbonate Copolymers. *Macromolecules*, **2001**, 34, 4082-4088	5.5	13
84	Determination of Pore Size in Mesoporous Thin Films from the Annihilation Lifetime of Positronium. *Journal of Physical Chemistry B*, **2001**, 105, 4657-4662	3.4	233
83	Effect of the Local Motions of Chemical Linkages on Segmental Mobility in Poly(ester carbonate) Block Copolymers. *Macromolecules*, **2001**, 34, 2559-2568	5.5	6
82	Correlation of positron annihilation and other dynamic properties in small molecule glass-forming substances. *Physical Review Letters*, **2001**, 87, 215901	7.4	80
81	Fracture behavior of glass bead filled epoxies: Cleaning process of glass beads **2001**, 79, 1371		1
80	Contributions of the nanovoid structure to the kinetics of moisture transport in epoxy resins. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 776-791	2.6	114
79	A discussion of the molecular mechanisms of moisture transport in epoxy resins. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 792-802	2.6	210
78	Role of inherent matrix toughness on fracture of glass bead filled epoxies. *Polymer*, **2000**, 41, 8375-8385	3.9	64
77	Micro-mechanical deformation mechanisms in the fracture of hybrid-particulate composites based on glass beads, rubber and epoxies. *Polymer Engineering and Science*, **2000**, 40, 2457-2470	2.3	19
76	Effects of rate on crack growth in a rubber-modified epoxy. *Acta Materialia*, **2000**, 48, 3581-3592	8.4	37
75	Fracture of glass bead/epoxy composites: on micro-mechanical deformations. *Polymer*, **2000**, 41, 8363-8373	3.9	130
74	Local Chain Dynamics in Poly(fluorocarbonate)s. *Macromolecules*, **2000**, 33, 6849-6852	5.5	16
73	Effect of Local Conformational Transition on Craze Initiation in Polyestercarbonates Containing Cyclohexylene Linkages. *Macromolecules*, **2000**, 33, 1338-1344	5.5	29
72	Local Chain Dynamics in Poly(ester carbonate)s. *Macromolecules*, **2000**, 33, 6853-6855	5.5	5

71	Determination of pore-size distribution in low-dielectric thin films. *Applied Physics Letters*, **2000**, 76, 1282-1284	3.4	168
70	Contributions of the nanovoid structure to the kinetics of moisture transport in epoxy resins **2000**, 38, 776		10
69	Positronium annihilation in mesoporous thin films. *Physical Review B*, **1999**, 60, R5157-R5160	3.3	239
68	The Molecular Basis for the Relationship between the Secondary Relaxation and Mechanical Properties of a Series of Polyester Copolymer Glasses. *Macromolecules*, **1999**, 32, 5944-5955	5.5	102
67	Molecular dynamics study of isobaric and isochoric glass transitions in a model amorphous polymer. *Journal of Chemical Physics*, **1999**, 110, 7058-7069	3.9	33
66	A Dielectric Relaxation Study of the Relaxation in Tetramethylbisphenol A Polycarbonate Plasticized by Tris(2-ethylhexyl) Phosphate. *Macromolecules*, **1999**, 32, 7921-7924	5.5	23
65	Development of a process zone in rubber-modified epoxy polymers. *International Journal of Fracture*, **1998**, 92, 271-286	2.3	27
64	Contributions of the nanovoid structure to the moisture absorption properties of epoxy resins. *Journal of Polymer Science, Part B: Polymer Physics*, **1998**, 36, 3035-3048	2.6	149
63	Two-dimensional transferred-echo double resonance study of molecular motion in a fluorinated polycarbonate. *Solid State Nuclear Magnetic Resonance*, **1998**, 12, 87-95	3.1	16
62	Constitutive modeling of polymeric foam material subjected to dynamic crash loading. *International Journal of Impact Engineering*, **1998**, 21, 369-386	4	208
61	Highly Porous Polyhedral Silsesquioxane Polymers. Synthesis and Characterization. *Journal of the American Chemical Society*, **1998**, 120, 8380-8391	16.4	342
60	Bundle Description of Packing and Dynamics in Polycarbonate Homopolymers, Copolymers, and Blends. *Macromolecules*, **1998**, 31, 3016-3020	5.5	19
59	Enhancing Plastic Yielding in Polyestercarbonate Glasses by 1,4-Cyclohexylene Linkage Addition. *Macromolecules*, **1998**, 31, 7865-7870	5.5	50
58	Molecular Structure Effects on the Secondary Relaxation and Impact Strength of a Series of Polyester Copolymer Glasses. *Macromolecules*, **1998**, 31, 5371-5382	5.5	91
57	Stress Evolution during Thermoset Cure. *Materials Research Society Symposia Proceedings*, **1998**, 515, 195		5
56	Contributions of the nanovoid structure to the moisture absorption properties of epoxy resins **1998**, 36, 3035		1
55	Interface and Surface Effects on the Glass Transition in Thin Polystyrene Films. *Physical Review Letters*, **1997**, 78, 1524-1527	7.4	512
54	Chain Packing and Dynamics in Polycarbonate Block Copolymers. *Macromolecules*, **1997**, 30, 6302-6306	5.5	15

53	Extended ensemble molecular dynamics method for constant strain rate uniaxial deformation of polymer systems. *Journal of Chemical Physics*, **1997**, 107, 4396-4407	3.9	48
52	Interactions of a liquid crystalline polymer with polycarbonate and poly(ethylene terephthalate). *Journal of Materials Science*, **1997**, 32, 3961-3970	4.3	10
51	Evolution of structure and properties of a liquid crystalline epoxy during curing. *Journal of Polymer Science, Part B: Polymer Physics*, **1997**, 35, 2363-2378	2.6	38
50	Measurement of Hole Volume in Amorphous Polymers Using Positron Spectroscopy. *Macromolecules*, **1996**, 29, 8507-8516	5.5	104
49	Mode II fracture of composites interlayered with nylon particles. *Composites Science and Technology* , **1996**, 56, 1223-1240	8.6	55
48	Micromechanical modeling of crack-tip rubber particle cavitational process in polymer toughening. *Polymer Engineering and Science*, **1996**, 36, 2320-2326	2.3	25
47	Evolution of nanometer voids in polycarbonate under mechanical stress and thermal expansion using positron spectroscopy. *Journal of Polymer Science, Part B: Polymer Physics*, **1995**, 33, 77-84	2.6	55
46	Positronium formation as a probe of polymer surfaces and thin films. *Physical Review Letters*, **1995**, 74, 4947-4950	7.4	138
45	Characterization of Absorbed Water in Perdeuterated Polycarbonate by Residual-Proton NMR. *Macromolecules*, **1995**, 28, 6477-6480	5.5	5
44	Changes of the hole volume in model epoxy networks. *Polymer*, **1995**, 36, 3997-4003	3.9	28
43	Influence of cyclic fatigue on the mechanical properties of amorphous polycarbonate. *Polymer*, **1995**, 36, 759-765	3.9	33
42	Fatigue craze initiation in polycarbonate: study by small-angle X-ray scattering. *Polymer*, **1994**, 35, 4287-4292	3.9	14
41	Mechanical properties of in situ composites based on polycarbonate and a liquid crystalline polymer. *Polymer*, **1994**, 35, 3463-3469	3.9	25
40	Fracture toughness and fracture mechanisms of polybutylene-terephthalate/polycarbonate/ impact-modifier blends. *Journal of Materials Science*, **1994**, 29, 4510-4522	4.3	46
39	Elastic modulus of in-situ composites of a liquid crystalline polymer and polycarbonate. *Polymer Composites*, **1994**, 15, 156-162	3	24
38	Positronium formation in semicrystalline poly(ethylene terephthalate). *Polymer*, **1994**, 35, 14-17	3.9	25
37	Phase transformations of a liquid crystalline epoxy during curing. *Polymer*, **1994**, 35, 2679-2682	3.9	56
36	Fatigue craze initiation in polycarbonate: study by transmission electron microscopy. *Polymer*, **1994**, 35, 3604-3611	3.9	16

35	Correlation between the Shear Yielding Behavior and Secondary Relaxations of Bisphenol A Polycarbonate and Related Copolymers. *Macromolecules*, **1994**, 27, 2761-2768	5.5	64
34	The preparation and morphology of PPO□poxy blends. *Journal of Applied Polymer Science*, **1993**, 48, 1051-1060	2.9	53
33	Effect of drawing on structure and properties of a liquid crystalline polymer and polycarbonate in-situ composite. *Polymer Engineering and Science*, **1993**, 33, 789-798	2.3	66
32	Toughening mechanisms in thermoplastic-modified epoxies: 1. Modification using poly(phenylene oxide). *Polymer*, **1993**, 34, 3658-3670	3.9	292
31	Scale of cooperative □relaxation of bisphenol A polycarbonate. *Macromolecules*, **1992**, 25, 6800-6809	5.5	36
30	Effect of cyclic stress on enthalpy relaxation in polycarbonate. *Journal of Polymer Science, Part B: Polymer Physics*, **1992**, 30, 221-230	2.6	21
29	Effect of cyclic stress on structural changes in polycarbonate as probed by positron annihilation lifetime spectroscopy. *Journal of Polymer Science, Part B: Polymer Physics*, **1992**, 30, 231-238	2.6	22
28	Interfacial adhesion and toughening mechanisms in an alloy of polycarbonate/polyethylene. *Polymer*, **1992**, 33, 4868-4871	3.9	48
27	Prediction of physical aging in controlled-release coatings: the application of the relaxation coupling model to glassy cellulose acetate. *Pharmaceutical Research*, **1991**, 8, 698-705	4.5	13
26	Preparation and characterization of maleimide-terminated poly(arylene ether sulfone) oligomers of various molecular weights. *Journal of Applied Polymer Science*, **1991**, 43, 1849-1858	2.9	19
25	Curing reaction and product properties of polysulfones terminated with active functional groups. *Journal of Applied Polymer Science*, **1991**, 43, 1865-1874	2.9	6
24	Some connections between viscoelastic properties of PVC and plasticized PVC and molecular kinetics. *Journal of Polymer Science, Part B: Polymer Physics*, **1991**, 29, 1493-1501	2.6	20
23	Mechanical modeling of initiation of localized yielding under plane stress conditions in rigid-rigid polymer alloys. *Polymer Engineering and Science*, **1991**, 31, 793-802	2.3	22
22	Secondary relaxation motion in bisphenol A polycarbonate. *Macromolecules*, **1991**, 24, 1905-1913	5.5	95
21	Antiplasticization effects on a secondary relaxation in plasticized glassy polycarbonates. *Macromolecules*, **1991**, 24, 61-67	5.5	70
20	Syntheses of alternating multiblock copolycarbonates with controlled block lengths. *Macromolecules*, **1991**, 24, 1590-1594	5.5	5
19	Structural changes in glassy polycarbonate induced by cyclic stresses. *Journal of Non-Crystalline Solids*, **1991**, 131-133, 492-496	3.9	3
18	Structural Changes in Glassy Polycarbonate Due to Cyclic Loading. *Materials Research Society Symposia Proceedings*, **1990**, 215, 61		

17	The effect of physical aging on the dissolution rate of anionic polyelectrolytes. *Pharmaceutical Research*, **1990**, 7, 648-53	4.5	19
16	A method of forming composite structures using in situ-formed liquid crystal polymer fibers in a thermoplastic matrix. *Polymer Composites*, **1990**, 11, 10-18	3	75
15	Toughening mechanisms in core-shell rubber modified polycarbonate. *Polymer*, **1990**, 31, 2267-2277	3.9	176
14	Toughening mechanisms in a multi-phase alloy of nylon 6,6/polyphenylene oxide. *Journal of Materials Science*, **1989**, 24, 1447-1457	4.3	101
13	Toughening mechanisms in a multi-phase alloy of nylon 6,6/polyphenylene oxide **1989**, 24, 1447		3
12	Deformation behaviour of a polycarbonate plate with a circular hole: finite elements model and experimental observations. *Polymer*, **1988**, 29, 1619-1624	3.9	24
11	Strain and temperature accelerated relaxation in polycarbonate. *Journal of Polymer Science, Part B: Polymer Physics*, **1988**, 26, 2463-2483	2.6	68
10	Local molecular motions in glassy and dissolved polycarbonates. *Macromolecules*, **1988**, 21, 3396-3401	5.5	31
9	Nonlinear viscoelasticity and yield: Application of a coupling model. *Polymer Engineering and Science*, **1987**, 27, 2-15	2.3	25
8	The biaxial deformation and yield behavior of bisphenol-a polycarbonate: Effect of anisotropy. *Polymer Engineering and Science*, **1986**, 26, 920-930	2.3	31
7	Proton spin relaxation and molecular motion in a bulk polycarbonate. *Macromolecules*, **1983**, 16, 658-665	5.5	63
6	Dynamic bulk and shear relaxation in glassy polymers. I. Experimental techniques and results on PMMA. *Journal of Polymer Science, Polymer Physics Edition*, **1982**, 20, 205-224		55
5	Molecular structure effects on the dynamic mechanical spectra of polycarbonates. *Macromolecules*, **1981**, 14, 54-64	5.5	189
4	The effect of strain rate on the toughening mechanisms of rubber-modified plastics. *Polymer Engineering and Science*, **1981**, 21, 205-211	2.3	53
3	Mechanical properties of polymer mixtures: Effect of compatibility. *Journal of Macromolecular Science - Physics*, **1980**, 17, 543-564	1.4	52
2	Mechanical properties of mixtures of two compatible polymers. *Polymer Engineering and Science*, **1977**, 17, 213-219	2.3	112
1	The effect of sudden strain-rate change on the yield behavior of bisphenol-A polycarbonate. *Polymer Engineering and Science*, **1974**, 14, 691-695	2.3	12