Emel Yilgor

List of Publications by Citations

98 papers	5,201 citations	38 h-index	70 g-index
104 ext. papers	5,722 ext. citations	3.9 avg, IF	5.78 L-index

#	Paper	IF	Citations
98	Electrospinning of polyurethane fibers. *Polymer*, **2002**, 43, 3303-3309	3.9	813
97	Critical parameters in designing segmented polyurethanes and their effect on morphology and properties: A comprehensive review. *Polymer*, **2015**, 58, A1-A36	3.9	327
96	Silicone containing copolymers: Synthesis, properties and applications. *Progress in Polymer Science*, **2014**, 39, 1165-1195	29.6	285
95	FTIR investigation of the influence of diisocyanate symmetry on the morphology development in model segmented polyurethanes. *Polymer*, **2006**, 47, 4105-4114	3.9	246
94	Comparison of hydrogen bonding in polydimethylsiloxane and polyether based urethane and urea copolymers. *Polymer*, **2000**, 41, 849-857	3.9	198
93	Hydrogen bonding and polyurethane morphology. I. Quantum mechanical calculations of hydrogen bond energies and vibrational spectroscopy of model compounds. *Polymer*, **2002**, 43, 6551-6559	3.9	191
92	Influence of system variables on the morphological and dynamic mechanical behavior of polydimethylsiloxane based segmented polyurethane and polyurea copolymers: a comparative perspective. *Polymer*, **2004**, 45, 6919-6932	3.9	148
91	Role of chain symmetry and hydrogen bonding in segmented copolymers with monodisperse hard segments. *Polymer*, **2005**, 46, 7317-7322	3.9	126
90	Intercalated chitosan/hydroxyapatite nanocomposites: Promising materials for bone tissue engineering applications. *Carbohydrate Polymers*, **2017**, 175, 38-46	10.3	102
89	Structure-Morphology-Property Behavior of Segmented Thermoplastic Polyurethanes and Polyureas Prepared without Chain Extenders. *Polymer Reviews*, **2007**, 47, 487-510	14	102
88	Hydrogen bonding: a critical parameter in designing silicone copolymers. *Polymer*, **2001**, 42, 7953-7959	3.9	100
87	Structure–property relationships and melt rheology of segmented, non-chain extended polyureas: Effect of soft segment molecular weight. *Polymer*, **2007**, 48, 290-301	3.9	99
86	Understanding the influence of hydrogen bonding and diisocyanate symmetry on the morphology and properties of segmented polyurethanes and polyureas: Computational and experimental study. *Polymer*, **2014**, 55, 4563-4576	3.9	97
85	The effect of varying soft and hard segment length on the structure–property relationships of segmented polyurethanes based on a linear symmetric diisocyanate, 1,4-butanediol and PTMO soft segments. *Polymer*, **2012**, 53, 5358-5366	3.9	95
84	Hydrogen bonding and polyurethane morphology. II. Spectroscopic, thermal and crystallization behavior of polyether blends with 1,3-dimethylurea and a model urethane compound. *Polymer*, **2002**, 43, 6561-6568	3.9	94
83	Facile preparation of superhydrophobic polymer surfaces. *Polymer*, **2012**, 53, 1180-1188	3.9	89
82	A New Generation of Highly Branched Polymers: Hyperbranched, Segmented Poly(urethane urea) Elastomers. *Macromolecules*, **2004**, 37, 7081-7084	5.5	77

81	Effect of Symmetry and H-bond Strength of Hard Segments on the Structure-Property Relationships of Segmented, Nonchain Extended Polyurethanes and Polyureas. *Journal of Macromolecular Science - Physics*, **2007**, 46, 853-875	1.4	75
80	Influence of the average surface roughness on the formation of superhydrophobic polymer surfaces through spin-coating with hydrophobic fumed silica. *Polymer*, **2015**, 62, 118-128	3.9	68
79	Understanding the structure development in hyperbranched polymers prepared by oligomeric A2+B3 approach: comparison of experimental results and simulations. *Polymer*, **2005**, 46, 4533-4543	3.9	67
78	Influence of soft segment molecular weight on the mechanical hysteresis and set behavior of silicone-urea copolymers with low hard segment contents. *Polymer*, **2011**, 52, 266-274	3.9	65
77	Novel triblock siloxane copolymers: Synthesis, characterization, and their use as surface modifying additives. *Journal of Polymer Science Part A*, **1989**, 27, 3673-3690	2.5	64
76	Isopropyl alcohol: an unusual, powerful, 'green' solvent for the preparation of silicone–urea copolymers with high urea contents. *Polymer*, **2003**, 44, 7787-7793	3.9	61
75	Hydrophilic polyurethaneurea membranes: influence of soft block composition on the water vapor permeation rates. *Polymer*, **1999**, 40, 5575-5581	3.9	61
74	Contribution of soft segment entanglement on the tensile properties of silicone–urea copolymers with low hard segment contents. *Polymer*, **2009**, 50, 4432-4437	3.9	60
73	Structure–property behavior of poly(dimethylsiloxane) based segmented polyurea copolymers modified with poly(propylene oxide). *Polymer*, **2005**, 46, 8185-8193	3.9	59
72	Structure–property behavior of segmented polyurethaneurea copolymers based on an ethylene–butylene soft segment. *Polymer*, **2005**, 46, 10191-10201	3.9	54
71	Fabrication of rigid poly(lactic acid) foams via thermally induced phase separation. *Polymer*, **2016**, 107, 240-248	3.9	50
70	Fumed silica filled poly(dimethylsiloxane-urea) segmented copolymers: Preparation and properties. *Polymer*, **2011**, 52, 4189-4198	3.9	50
69	Effect of soft segment molecular weight on tensile properties of poly(propylene oxide) based polyurethaneureas. *Polymer*, **2012**, 53, 4614-4622	3.9	49
68	Probing the urea hard domain connectivity in segmented, non-chain extended polyureas using hydrogen-bond screening agents. *Polymer*, **2008**, 49, 174-179	3.9	47
67	Polyurethaneurea–silica nanocomposites: Preparation and investigation of the structure–property behavior. *Polymer*, **2013**, 54, 5310-5320	3.9	45
66	Polyisobutylene-based polyurethanes. II. Polyureas containing mixed PIB/PTMO soft segments. *Journal of Polymer Science Part A*, **2009**, 47, 2787-2797	2.5	43
65	Preparation of segmented, high molecular weight, aliphatic poly(ether-urea) copolymers in isopropanol. In-situ FTIR studies and polymer synthesis. *Polymer*, **2004**, 45, 5829-5836	3.9	43
64	Polyisobutylene-based segmented polyureas. I. Synthesis of hydrolytically and oxidatively stable polyureas. *Journal of Polymer Science Part A*, **2009**, 47, 38-48	2.5	42

63	Time-dependent morphology development in segmented polyetherurea copolymers based on aromatic diisocyanates. *Journal of Polymer Science, Part B: Polymer Physics*, **2009**, 47, 471-483	2.6	42
62	Electrospun polycaprolactone/silk fibroin nanofibrous bioactive scaffolds for tissue engineering applications. *Polymer*, **2019**, 168, 86-94	3.9	39
61	Tunable wetting of polymer surfaces. *Langmuir*, **2012**, 28, 14808-14	4	39
60	Time-Dependent Morphology Development in a Segmented Polyurethane with Monodisperse Hard Segments Based on 1,4-Phenylene Diisocyanate. *Macromolecules*, **2005**, 38, 10074-10079	5.5	37
59	Rheology and extrusion of medical-grade thermoplastic polyurethane. *Polymer Engineering and Science*, **2003**, 43, 1863-1877	2.3	35
58	A comparative study of the structure–property behavior of highly branched segmented poly(urethane urea) copolymers and their linear analogs. *Polymer*, **2005**, 46, 10180-10190	3.9	35
57	Thermal stabilities of end groups in hydroxyalkyl terminated polydimethylsiloxane oligomers. *Polymer Bulletin*, **1998**, 40, 525-532	2.4	31
56	Polyisobutylene-based polyurethanes. III. Polyurethanes containing PIB/PTMO soft co-segments. *Journal of Polymer Science Part A*, **2009**, 47, 5278-5290	2.5	30
55	Additive effects of dexamethasone in nebulized salbutamol or L-epinephrine treated infants with acute bronchiolitis. *Pediatrics International*, **2004**, 46, 539-44	1.2	30
54	Structure–Property Behavior of New Segmented Polyurethanes and Polyureas Without Use of Chain Extenders. *Rubber Chemistry and Technology*, **2005**, 78, 737-753	1.7	30
53	Influence of the coating method on the formation of superhydrophobic silicone–urea surfaces modified with fumed silica nanoparticles. *Progress in Organic Coatings*, **2015**, 84, 143-152	4.8	26
52	Synthesis and structure-property behavior of polycaprolactone-polydimethylsiloxane-polycaprolactone triblock copolymers. *Polymer*, **2016**, 83, 138-153	3.9	24
51	1,3-bis(–aminopropyl)tetramethyldisiloxane modified epoxy resins: curing and characterization. *Polymer*, **1998**, 39, 1691-1695	3.9	24
50	Effect of Chemical Composition on Large Deformation Mechanooptical Properties of High Strength Thermoplastic Poly(urethane urea)s. *Macromolecules*, **2004**, 37, 8676-8685	5.5	24
49	Preparation of monolithic polycaprolactone foams with controlled morphology. *Polymer*, **2018**, 136, 166-178	3.9	23
48	Modification of polyolefins with silicone copolymers. I. Processing behavior and surface characterization of PP and HDPE blended with silicone copolymers. *Journal of Applied Polymer Science*, **2002**, 83, 1625-1634	2.9	23
47	Simple processes for the preparation of superhydrophobic polymer surfaces. *Polymer*, **2016**, 99, 580-593	3.9	22
46	Multiscale Modeling of the Morphology and Properties of Segmented Silicone-Urea Copolymers. *Journal of Inorganic and Organometallic Polymers and Materials*, **2012**, 22, 604-616	3.2	21

45	Temperature-dependent changes in the hydrogen bonded hard segment network and microphase morphology in a model polyurethane: Experimental and simulation studies. *Journal of Polymer Science, Part B: Polymer Physics*, **2018**, 56, 182-192	2.6	20
44	Surface properties of polyamides modified with reactive polydimethylsiloxane oligomers and copolymers. *Polymer*, **2003**, 44, 7271-7279	3.9	19
43	Influence of Annealing on the Performance of Short Glass Fiber-reinforced Polyphenylene Sulfide (PPS) Composites. *Journal of Composite Materials*, **2005**, 39, 21-33	2.7	19
42	Denver developmental screening test II for early identification of the infants who will develop major neurological deficit as a sequalea of hypoxic-ischemic encephalopathy. *Pediatrics International*, **2001**, 43, 400-4	1.2	19
41	Lack of association between plasma leptin levels and appetite in children with iron deficiency. *Nutrition*, **2001**, 17, 657-9	4.8	19
40	Effect of UV/ozone irradiation on the surface properties of electrospun webs and films prepared from polydimethylsiloxane–urea copolymers. *Applied Surface Science*, **2012**, 258, 4246-4253	6.7	18
39	Real time mechano-optical study on deformation behavior of PTMO/CHDI-based polyetherurethanes under uniaxial extension. *Polymer*, **2009**, 50, 4644-4655	3.9	18
38	Evaluation of cerebral maturation by visual and quantitative analysis of resting electroencephalography in children with primary nocturnal enuresis. *Journal of Child Neurology*, **2001**, 16, 714-8	2.5	18
37	Hydrophilization of silicone–urea copolymer surfaces by UV/ozone: Influence of PDMS molecular weight on surface oxidation and hydrophobic recovery. *Polymer*, **2013**, 54, 6665-6675	3.9	17
36	Wetting behavior of superhydrophobic poly(methyl methacrylate). *Progress in Organic Coatings*, **2018**, 125, 530-536	4.8	16
35	Rheology and processing of BaSO4-filled medical-grade thermoplastic polyurethane. *Polymer Engineering and Science*, **2004**, 44, 1941-1948	2.3	16
34	A DSC kinetic study of the epoxy network system bisphenol-A diglycidylether-bis(4-aminocyclohexyl)methane. *Polymer Bulletin*, **1981**, 4, 323-327	2.4	16
33	Reversible switching of wetting properties and erasable patterning of polymer surfaces using plasma oxidation and thermal treatment. *Applied Surface Science*, **2018**, 441, 841-852	6.7	15
32	Premarital screening of hemoglobinopathies: a pilot study in Turkey. *Human Heredity*, **1996**, 46, 112-4	1.1	15
31	Effect of reaction solvent on hydroxyapatite synthesis in sol-gel process. *Royal Society Open Science* , **2017**, 4, 171098	3.3	14
30	Effect of filler content on the structure-property behavior of poly(ethylene oxide) based polyurethaneurea-silica nanocomposites. *Polymer Engineering and Science*, **2018**, 58, 1097-1107	2.3	13
29	PIB-based polyurethanes. IV. The morphology of polyurethanes containing soft co-segments*. *Journal of Polymer Science Part A*, **2009**, 47, 6180-6190	2.5	13
28	Influence of polymerization procedure on polymer topology and other structural properties in highly branched polymers obtained by A2 + B3 approach. *Polymer*, **2008**, 49, 1414-1424	3.9	13

27	Bilateral adrenal cystic neuroblastoma with massive hepatomegaly and intracystic hemorrhage. *Pediatric Blood and Cancer*, **2005**, 44, 525-6	3	13
26	Catalyst effect on the transesterification reactions between polycarbonate and polycaprolactone-B-polydimethylsiloxane triblock copolymers. *Polymer Bulletin*, **1999**, 43, 207-214	2.4	12
25	Mechanical reinforcement and memory effect of strain-induced soft segment crystals in thermoplastic polyurethane-urea elastomers. *Polymer*, **2021**, 223, 123708	3.9	12
24	Spontaneous formation of microporous poly(lactic acid) coatings. *Progress in Organic Coatings*, **2018**, 125, 249-256	4.8	12
23	Assessment of cardiac functions in sickle cell anemia with Doppler myocardial performance index. *Journal of Tropical Pediatrics*, **2010**, 56, 195-7	1.2	11
22	Effect of soft segment molecular weight on the glass transition, crystallinity, molecular mobility and segmental dynamics of poly(ethylene oxide) based poly(urethane–urea) copolymers. *RSC Advances*, **2017**, 7, 40745-40754	3.7	10
21	Antibacterial Silicone-Urea/Organoclay Nanocomposites. *Silicon*, **2009**, 1, 183-190	2.4	10
20	Modification of polyolefins with silicone copolymers. II. Thermal, mechanical, and tribological behavior of PP and HDPE blended with silicone copolymers. *Journal of Applied Polymer Science*, **2002**, 84, 535-540	2.9	10
19	Synthesis and characterization of free radical cured Bis-methacryloxy bisphenol-A epoxy networks. *Polymer Composites*, **1983**, 4, 120-125	3	10
18	Critical parameters controlling the properties of monolithic poly(lactic acid) foams prepared by thermally induced phase separation. *Journal of Polymer Science, Part B: Polymer Physics*, **2019**, 57, 98-108	2.6	10
17	3D coffee stains. *Materials Chemistry Frontiers*, **2017**, 1, 2360-2367	7.8	8
16	Luminescent Nd3+ doped silicone–urea copolymers. *Polymer*, **2006**, 47, 982-990	3.9	8
15	Exploring Urea Phase Connectivity in Molded Flexible Polyurethane Foam Formulations Using LiBr as a Probe. *Journal of Macromolecular Science - Physics*, **2003**, 42, 1125-1139	1.4	7
14	Anomalous dilute solution properties of segmented polydimethylsiloxane–polyurea copolymers in isopropyl alcohol. *Polymer*, **2006**, 47, 1179-1186	3.9	6
13	3D printed poly(lactic acid) scaffolds modified with chitosan and hydroxyapatite for bone repair applications. *Materials Today Communications*, **2020**, 25, 101515	2.5	6
12	Two new polymers as candidates for rhinoplasty allografts: an experimental study in a rabbit model. *Annals of Otology, Rhinology and Laryngology*, **2013**, 122, 474-9	2.1	5
11	Severe infantile hypotonia with ethylmalonic aciduria: case report. *Journal of Child Neurology*, **2008**, 23, 703-5	2.5	5
10	Effect of surface modification of colloidal silica nanoparticles on the rigid amorphous fraction and mechanical properties of amorphous polyurethane–urea–silica nanocomposites. *Journal of Polymer Science Part A*, **2019**, 57, 2543-2556	2.5	5

9	Silicone-Urea Copolymers Modified with Polyethers. *ACS Symposium Series*, **2007**, 100-115	0.4	4
8	Effect of gestational age on plasma fibronectin concentrations in the neonate. *Pediatrics International*, **2001**, 43, 26-8	1.2	4
7	High Strength Silicone-Urethane Copolymers: Synthesis and Properties. *ACS Symposium Series*, **2000**, 395-407	0.4	3
6	The Study on the First Year Students of the Faculty of Medicine to Assess Their Health Compromising Behaviors and Knowledge About Reproductive Health **2010**, 30, 1533-1542		2
5	3D Printed Biodegradable Polyurethaneurea Elastomer Recapitulates Skeletal Muscle Structure and Function. *ACS Biomaterials Science and Engineering*, **2021**, 7, 5189-5205	5.5	1
4	In vivo tissue response and durability of five novel synthetic polymers in a rabbit model. *Acta Otorhinolaryngologica Italica*, **2016**, 36, 101-6	2.8	1
3	Geometric Confinement Controls Stiffness, Strength, Extensibility, and Toughness in Poly(urethane□rea) Copolymers. *Macromolecules*, **2021**, 54, 4704-4725	5.5	0
2	Informal Undergraduate Polymer Research Program at Koc University Chemistry Department. *Polymer Reviews*, **2008**, 48, 633-641	14	
1	Siloxane Terpolymers as Compatibilizers for Polymer Blends **1997**, 195-209		