Emel Yilgor

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1980220/publications.pdf

Version: 2024-02-01

104 papers	6,280 citations	81900 39 h-index	69250 77 g-index
104 all docs	104 docs citations	104 times ranked	5977 citing authors

#	Article	IF	Citations
1	Electrospinning of polyurethane fibers. Polymer, 2002, 43, 3303-3309.	3.8	942
2	Critical parameters in designing segmented polyurethanes and their effect on morphology and properties: A comprehensive review. Polymer, 2015, 58, A1-A36.	3.8	439
3	Silicone containing copolymers: Synthesis, properties and applications. Progress in Polymer Science, 2014, 39, 1165-1195.	24.7	397
4	FTIR investigation of the influence of diisocyanate symmetry on the morphology development in model segmented polyurethanes. Polymer, 2006, 47, 4105-4114.	3.8	294
5	Comparison of hydrogen bonding in polydimethylsiloxane and polyether based urethane and urea copolymers. Polymer, 2000, 41, 849-857.	3.8	226
6	Hydrogen bonding and polyurethane morphology. I. Quantum mechanical calculations of hydrogen bond energies and vibrational spectroscopy of model compounds. Polymer, 2002, 43, 6551-6559.	3.8	223
7	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.	3.8	177
8	Role of chain symmetry and hydrogen bonding in segmented copolymers with monodisperse hard segments. Polymer, 2005, 46, 7317-7322.	3.8	148
9	Intercalated chitosan/hydroxyapatite nanocomposites: Promising materials for bone tissue engineering applications. Carbohydrate Polymers, 2017, 175, 38-46.	10.2	130
10	Structureâ€Morphologyâ€Property Behavior of Segmented Thermoplastic Polyurethanes and Polyureas Prepared without Chain Extenders. Polymer Reviews, 2007, 47, 487-510.	10.9	120
11	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.	3.8	120
12	The effect of varying soft and hard segment length on the structureâ€“property relationships of segmented polyurethanes based on a linear symmetric diisocyanate, 1,4-butanediol and PTMO soft segments. Polymer, 2012, 53, 5358-5366.	3.8	119
13	Structureâ€“property relationships and melt rheology of segmented, non-chain extended polyureas: Effect of soft segment molecular weight. Polymer, 2007, 48, 290-301.	3.8	118
14	Hydrogen bonding: a critical parameter in designing silicone copolymers. Polymer, 2001, 42, 7953-7959.	3.8	111
15	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.	3.8	102
16	Facile preparation of superhydrophobic polymer surfaces. Polymer, 2012, 53, 1180-1188.	3.8	99
17	Effect of Symmetry and Hâ€bond Strength of Hard Segments on the Structureâ€Property Relationships of Segmented, Nonchain Extended Polyurethanes and Polyureas. Journal of Macromolecular Science - Physics, 2007, 46, 853-875.	1.0	94
18	A New Generation of Highly Branched Polymers:â€‰ Hyperbranched, Segmented Poly(urethane urea) Elastomers. Macromolecules, 2004, 37, 7081-7084.	4.8	84

#	Article	IF	Citations
19	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.	3.8	83
20	Hydrophilic polyurethaneurea membranes: influence of soft block composition on the water vapor permeation rates. Polymer, 1999, 40, 5575-5581.	3.8	78
21	Electrospun polycaprolactone/silk fibroin nanofibrous bioactive scaffolds for tissue engineering applications. Polymer, 2019, 168, 86-94.	3.8	74
22	Novel triblock siloxane copolymers: Synthesis, characterization, and their use as surface modifying additives. Journal of Polymer Science Part A, 1989, 27, 3673-3690.	2.3	73
23	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.	3.8	73
24	Contribution of soft segment entanglement on the tensile properties of siliconeâ€“urea copolymers with low hard segment contents. Polymer, 2009, 50, 4432-4437.	3.8	72
25	Understanding the structure development in hyperbranched polymers prepared by oligomeric A2+B3 approach: comparison of experimental results and simulations. Polymer, 2005, 46, 4533-4543.	3.8	71
26	Isopropyl alcohol: an unusual, powerful, â€˜greenâ€™ solvent for the preparation of siliconeâ€“urea copolymers with high urea contents. Polymer, 2003, 44, 7787-7793.	3.8	67
27	Structureâ€“property behavior of poly(dimethylsiloxane) based segmented polyurea copolymers modified with poly(propylene oxide). Polymer, 2005, 46, 8185-8193.	3.8	67
28	Fabrication of rigid poly(lactic acid) foams via thermally induced phase separation. Polymer, 2016, 107, 240-248.	3.8	61
29	Structureâ€“property behavior of segmented polyurethaneurea copolymers based on an ethyleneâ€“butylene soft segment. Polymer, 2005, 46, 10191-10201.	3.8	60
30	Effect of soft segment molecular weight on tensile properties of poly(propylene oxide) based polyurethaneureas. Polymer, 2012, 53, 4614-4622.	3.8	55
31	Polyurethaneureaâ€“silica nanocomposites: Preparation and investigation of the structureâ€“property behavior. Polymer, 2013, 54, 5310-5320.	3.8	53
32	Probing the urea hard domain connectivity in segmented, non-chain extended polyureas using hydrogen-bond screening agents. Polymer, 2008, 49, 174-179.	3.8	52
33	Fumed silica filled poly(dimethylsiloxane-urea) segmented copolymers: Preparation and properties. Polymer, 2011, 52, 4189-4198.	3.8	51
34	Polyisobutyleneâ€based polyurethanes. II. Polyureas containing mixed PIB/PTMO soft segments. Journal of Polymer Science Part A, 2009, 47, 2787-2797.	2.3	48
35	Timeâ€dependent morphology development in segmented polyetherurea copolymers based on aromatic diisocyanates. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 471-483.	2.1	48
36	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.	3.8	47

#	Article	IF	Citations
37	Polyisobutyleneâ€based segmented polyureas. I. Synthesis of hydrolytically and oxidatively stable polyureas. Journal of Polymer Science Part A, 2009, 47, 38-48.	2.3	47
38	Tunable Wetting of Polymer Surfaces. Langmuir, 2012, 28, 14808-14814.	3.5	44
39	Time-Dependent Morphology Development in a Segmented Polyurethane with Monodisperse Hard Segments Based on 1,4-Phenylene Diisocyanate. Macromolecules, 2005, 38, 10074-10079.	4.8	43
40	Rheology and extrusion of medical-grade thermoplastic polyurethane. Polymer Engineering and Science, 2003, 43, 1863-1877.	3.1	41
41	Additive effects of dexamethasone in nebulized salbutamol or l-epinephrine treated infants with acute bronchiolitis. Pediatrics International, 2004, 46, 539-544.	0.5	40
42	A comparative study of the structureâ€“property behavior of highly branched segmented poly(urethane) Tj ETQq0 0 0 rgBT /Overlock 10	3.8	39
43	Influence of the coating method on the formation of superhydrophobic siliconeâ€“urea surfaces modified with fumed silica nanoparticles. Progress in Organic Coatings, 2015, 84, 143-152.	3.9	37
44	Thermal stabilities of end groups in hydroxyalkyl terminated polydimethylsiloxane oligomers. Polymer Bulletin, 1998, 40, 525-532.	3.3	34
45	Structure â€" Property Behavior of New Segmented Polyurethanes and Polyureas Without Use of Chain Extenders. Rubber Chemistry and Technology, 2005, 78, 737-753.	1.2	34
46	Synthesis and structure-property behavior of polycaprolactone-polydimethylsiloxane-polycaprolactone triblock copolymers. Polymer, 2016, 83, 138-153.	3.8	32
47	Polyisobutyleneâ€based polyurethanes. III. Polyurethanes containing PIB/PTMO soft coâ€segments. Journal of Polymer Science Part A, 2009, 47, 5278-5290.	2.3	31
48	Temperatureâ€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.	2.1	31
49	Effect of Chemical Composition on Large Deformation Mechanooptical Properties of High Strength Thermoplastic Poly(urethane urea)s. Macromolecules, 2004, 37, 8676-8685.	4.8	28
50	Preparation of monolithic polycaprolactone foams with controlled morphology. Polymer, 2018, 136, 166-178.	3.8	27
51	Real time mechano-optical study on deformation behavior of PTMO/CHDI-based polyetherurethanes under uniaxial extension. Polymer, 2009, 50, 4644-4655.	3.8	26
52	Mechanical reinforcement and memory effect of strain-induced soft segment crystals in thermoplastic polyurethane-urea elastomers. Polymer, 2021, 223, 123708.	3.8	26
53	1,3-bis(Î³-aminopropyl)tetramethyldisiloxane modified epoxy resins: curing and characterization. Polymer, 1998, 39, 1691-1695.	3.8	25
54	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.	2.6	25

#	Article	IF	Citations
55	3D printed poly(lactic acid) scaffolds modified with chitosan and hydroxyapatite for bone repair applications. Materials Today Communications, 2020, 25, 101515.	1.9	25
56	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, 400-404.	0.5	24
57	Lack of association between plasma leptin levels and appetite in children with iron deficiency. Nutrition, 2001, 17, 657-659.	2.4	24
58	Effect of reaction solvent on hydroxyapatite synthesis in solâ€“gel process. Royal Society Open Science, 2017, 4, 171098.	2.4	24
59	Effect of UV/ozone irradiation on the surface properties of electrospun webs and films prepared from polydimethylsiloxaneâ€“urea copolymers. Applied Surface Science, 2012, 258, 4246-4253.	6.1	23
60	Simple processes for the preparation of superhydrophobic polymer surfaces. Polymer, 2016, 99, 580-593.	3.8	23
61	Premarital Screening of Hemoglobinopathies: A Pilot Study in Turkey. Human Heredity, 1996, 46, 112-114.	0.8	22
62	Evaluation of Cerebral Maturation by Visual and Quantitative Analysis of Resting Electroencephalography in Children With Primary Nocturnal Enuresis. Journal of Child Neurology, 2001, 16, 714-718.	1.4	22
63	Multiscale Modeling of the Morphology and Properties of Segmented Silicone-Urea Copolymers. Journal of Inorganic and Organometallic Polymers and Materials, 2012, 22, 604-616.	3.7	22
64	Surface properties of polyamides modified with reactive polydimethylsiloxane oligomers and copolymers. Polymer, 2003, 44, 7271-7279.	3.8	21
65	A DSC kinetic study of the epoxy network system bisphenol-A diglycidylether-bis(4-aminocyclohexyl)methane. Polymer Bulletin, 1981, 4, 323-327.	3.3	20
66	Influence of Annealing on the Performance of Short Glass Fiber-reinforced Polyphenylene Sulfide (PPS) Composites. Journal of Composite Materials, 2005, 39, 21-33.	2.4	20
67	Hydrophilization of siliconeâ€“urea copolymer surfaces by UV/ozone: Influence of PDMS molecular weight on surface oxidation and hydrophobic recovery. Polymer, 2013, 54, 6665-6675.	3.8	20
68	Reversible switching of wetting properties and erasable patterning of polymer surfaces using plasma oxidation and thermal treatment. Applied Surface Science, 2018, 441, 841-852.	6.1	20
69	Wetting behavior of superhydrophobic poly(methyl methacrylate). Progress in Organic Coatings, 2018, 125, 530-536.	3.9	18
70	Rheology and processing of BaSO4-filled medical-grade thermoplastic polyurethane. Polymer Engineering and Science, 2004, 44, 1941-1948.	3.1	17
71	PIBâ€based polyurethanes. IV. The morphology of polyurethanes containing soft coâ€segments*. Journal of Polymer Science Part A, 2009, 47, 6180-6190.	2.3	15
72	Effect of soft segment molecular weight on the glass transition, crystallinity, molecular mobility and segmental dynamics of poly(ethylene oxide) based poly(urethaneâ€“urea) copolymers. RSC Advances, 2017, 7, 40745-40754.	3.6	15

#	Article	IF	Citations
73	Effect of filler content on the structureâ€property behavior of poly(ethylene oxide) based polyurethaneureaâ€silica nanocomposites. Polymer Engineering and Science, 2018, 58, 1097-1107.	3.1	15
74	Spontaneous formation of microporous poly(lactic acid) coatings. Progress in Organic Coatings, 2018, 125, 249-256.	3.9	15
75	Bilateral adrenal cystic neuroblastoma with massive hepatomegaly and intracystic hemorrhage. Pediatric Blood and Cancer, 2005, 44, 525-526.	1.5	14
76	3D Printed Biodegradable Polyurethaneurea Elastomer Recapitulates Skeletal Muscle Structure and Function. ACS Biomaterials Science and Engineering, 2021, 7, 5189-5205.	5.2	14
77	Synthesis and characterization of free radical cured Bis-methacryloxy bisphenol-A epoxy networks. Polymer Composites, 1983, 4, 120-125.	4.6	13
78	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.	3.8	13
79	Catalyst effect on the transesterification reactions between polycarbonate and polycaprolactone-B-polydimethylsiloxane triblock copolymers. Polymer Bulletin, 1999, 43, 207-214.	3.3	12
80	Antibacterial Silicone-Urea/Organoclay Nanocomposites. Silicon, 2009, 1, 183-190.	3.3	12
81	Assessment of Cardiac Functions in Sickle Cell Anemia with Doppler Myocardial Performance Index. Journal of Tropical Pediatrics, 2010, 56, 195-197.	1.5	12
82	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.	2.1	12
83	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.	2.6	10
84	Exploring Urea Phase Connectivity in Molded Flexible Polyurethane Foam Formulations Using LiBr as a Probe. Journal of Macromolecular Science - Physics, 2003, 42, 1125-1139.	1.0	9
85	Luminescent Nd3+ doped siliconeâ€“urea copolymers. Polymer, 2006, 47, 982-990.	3.8	9
86	3D coffee stains. Materials Chemistry Frontiers, 2017, 1, 2360-2367.	5.9	9
87	Effect of surface modification of colloidal silica nanoparticles on the rigid amorphous fraction and mechanical properties of amorphous polyurethaneâ€“ureaâ€“silica nanocomposites. Journal of Polymer Science Part A, 2019, 57, 2543-2556.	2.3	7
88	Anomalous dilute solution properties of segmented polydimethylsiloxaneâ€“polyurea copolymers in isopropyl alcohol. Polymer, 2006, 47, 1179-1186.	3.8	6
89	Severe Infantile Hypotonia With Ethylmalonic Aciduria: Case Report. Journal of Child Neurology, 2008, 23, 703-705.	1.4	5
90	Two New Polymers as Candidates for Rhinoplasty Allografts: An Experimental Study in a Rabbit Model. Annals of Otology, Rhinology and Laryngology, 2013, 122, 474-479.	1.1	5

#	Article	IF	Citations
91	Geometric Confinement Controls Stiffness, Strength, Extensibility, and Toughness in Poly(urethaneâ€“urea) Copolymers. Macromolecules, 2021, 54, 4704-4725.	4.8	5
92	Effect of gestational age on plasma fibronectin concentrations in the neonate. Pediatrics International, 2001, 43, 26-28.	0.5	4
93	Silicone-Urea Copolymers Modified with Polyethers. ACS Symposium Series, 2007, , 100-115.	0.5	4
94	Stiff, Strong, Tough, and Highly Stretchable Hydrogels Based on Dual Stimuli-Responsive Semicrystalline Poly(urethaneâ€“urea) Copolymers. ACS Applied Polymer Materials, 2021, 3, 5683-5695.	4.4	4
95	High Strength Silicone-Urethane Copolymers: Synthesis and Properties. ACS Symposium Series, 2000, , 395-407.	0.5	3
96	Erbium(III)â€doped polyurethaneureas: Novel broadband ultravioletâ€toâ€visible converters. Journal of Applied Polymer Science, 2010, 117, 378-383.	2.6	2
97	BiocompatibilitÃ e durata in vivo di cinque nuovi polimeri sintetici testati su coniglio. Acta Otorhinolaryngologica Italica, 2016, 36, 101-106.	1.5	2
98	The Study on the First Year Students of the Faculty of Medicine to Assess Their Health Compromising Behaviors and Knowledge About Reproductive Health. Turkiye Klinikleri Journal of Medical Sciences, 2010, 30, 1533-1542.	0.1	2
99	Polyurethanes: Design, synthesis and structure-property behavior of versatile materials. Hacettepe Journal of Biology and Chemistry, 2020, 48, 425-445.	0.9	1
100	Copolymerization of fluorinated acrylic monomers and sodium-p-styrene sulfonate. Journal of Fluorine Chemistry, 1982, 21, 66.	1.7	0
101	Informal Undergraduate Polymer Research Program at Koc University Chemistry Department. Polymer Reviews, 2008, 48, 633-641.	10.9	0
102	Luminescence Characteristics of Nd3+-Doped Silicone-Urea Copolymers. , 2006, , .		0
103	Siloxane Terpolymers as Compatibilizers for Polymer Blends. , 1997, , 195-209.		0
104	All-protein 3D coffee stain lasers. , 2018, , .		0