Gary E Wnek

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/1129236/gary-e-wnek-publications-by-year.pdf
Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100 papers	9,150 citations	36 h-index	95 g-index
106 ext. papers	9,736 ext. citations	6.1 avg, IF	5.78 L-index

#	Paper	IF	Citations
100	Bio-Mimicking, Electrical Excitability Phenomena Associated With Synthetic Macromolecular Systems: A Brief Review With Connections to the Cytoskeleton and Membraneless Organelles.. *Frontiers in Molecular Neuroscience*, **2022**, 15, 830892	6.1	
99	Microcapillary Reactors via Coaxial Electrospinning: Fabrication of Small Poly(Acrylic Acid) Gel Beads and Thin Threads of Biological Cell Dimensions. *Gels*, **2021**, 7,	4.2	1
98	Physically-cross-linked poly(vinyl alcohol) cell culture plate coatings facilitate preservation of cell-cell interactions, spheroid formation, and stemness. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2021**, 109, 1744-1753	3.5	5
97	Tannic acid based super-intumescent coatings for prolonged fire protection of cardboard and wood. *SPE Polymers*, **2021**, 2, 153-168	1.1	2
96	N,P-Codoped, Low-Density, Amorphous Carbon Foam for High-Performance Supercapacitors: Polymer-Based Scalable Production at Low Cost. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100070	1.6	3
95	Novel strategies to grow natural fibers with improved thermal stability and fire resistance. *Journal of Cleaner Production*, **2021**, 320, 128729	10.3	2
94	Macromolecules of the cell: a polymer science viewpoint. *Polymer International*, **2020**, 70, 885	3.3	1
93	Poly (acrylic acid) (PAA) is a contact system activator with properties to stop hemorrhage. *Thrombosis Research*, **2020**, 193, 142-145	8.2	2
92	Intumescent, Epoxy-Based Flame-Retardant Coatings Based on Poly(acrylic acid) Compositions. *ACS Applied Materials & Interfaces*, **2020**, 12, 18997-19005	9.5	16
91	An improved tactile sensing device for material characterization via friction-induced vibrations. *Sensors and Actuators A: Physical*, **2020**, 303, 111824	3.9	
90	Thermoformable high oxygen barrier multilayer EVOH/LDPE film/foam. *Journal of Applied Polymer Science*, **2020**, 137, 48903	2.9	3
89	Enhanced elasticity in poly(acrylic acid) gels via synthesis in the presence of high concentrations of select salts. *Soft Matter*, **2019**, 15, 7596-7604	3.6	6
88	Fabrication of Surlyn ionomer fibers using a novel coextrusion approach and mechanical property characterization. *Journal of Applied Polymer Science*, **2019**, 136, 48046	2.9	1
87	The Rock of Randomness□a physical oracle for securing data off the digital grid. *MRS Communications*, **2019**, 9, 67-76	2.7	2
86	Flame-Retardant Polyurethane Foams: One-Pot, Bioinspired Silica Nanoparticle Coating. *ACS Applied Polymer Materials*, **2019**, 1, 2015-2022	4.3	19
85	Deformation and Elastic Recovery of Acrylate-Based Liquid Crystalline Elastomers. *Macromolecules*, **2019**, 52, 8248-8255	5.5	11
84	Antimicrobial Activity of Silver Containing Crosslinked Poly(Acrylic Acid) Fibers. *Micromachines*, **2019**, 10,	3.3	9

83	Light Control with Liquid Crystalline Elastomers. *Advanced Optical Materials*, **2019**, 7, 1801683	8.1	49
82	Structure–Property Relationships of Small Organic Molecules as a Prelude to the Teaching of Polymer Science. *Journal of Chemical Education*, **2017**, 94, 1647-1654	2.4	4
81	Polymeric Nanofiber/Antifungal Formulations Using a Novel Co-extrusion Approach. *AAPS PharmSciTech*, **2017**, 18, 1917-1924	3.9	15
80	Perspective: Do macromolecules play a role in the mechanisms of nerve stimulation and nervous transmission?. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 7-14	2.6	13
79	Artificial Polymeric Scaffolds as Extracellular Matrix Substitutes for Autologous Conjunctival Goblet Cell Expansion **2016**, 57, 6134-6146		16
78	Electrophoretic calcium phosphate mineralization of collagen hydrogels. *Green Materials*, **2015**, 3, 71-79	3.2	2
77	Electrospun crosslinked poly(acrylic acid) fiber constructs: towards a synthetic model of the cortical layer of nerve. *Polymer International*, **2015**, 64, 42-48	3.3	22
76	Manufacturing of polymer continuous nanofibers using a novel co-extrusion and multiplication technique. *Polymer*, **2014**, 55, 673-685	3.9	59
75	Highly cited research articles in Journal of Controlled Release: Commentaries and perspectives by authors. *Journal of Controlled Release*, **2014**, 190, 29-74	11.7	47
74	Electrospun DOXY-h loaded-poly(acrylic acid) nanofiber mats: in vitro drug release and antibacterial properties investigation. *Journal of Biomaterials Science, Polymer Edition*, **2014**, 25, 1292-305	3.5	30
73	Electrospun collagen and its applications in regenerative medicine. *Drug Delivery and Translational Research*, **2012**, 2, 313-22	6.2	31
72	Mouse retinal progenitor cell dynamics on electrospun poly (?-caprolactone). *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 1451-65	3.5	17
71	All-Organic, Stimuli-Responsive Polymer Composites with Electrospun Fiber Fillers.. *ACS Macro Letters*, **2012**, 1, 80-83	6.6	37
70	Electrospinning of in situ crosslinked collagen nanofibers. *Journal of Materials Chemistry*, **2012**, 22, 19412		85
69	Stimuli-Responsive and Mechanically-Switchable Electrospun Composites. *Macromolecules*, **2012**, 45, 9092-9099	5.5	26
68	Leukocyte Factor XII Mediates Inflammation and Its Deficiency Promotes Wound Healing. *Blood*, **2012**, 120, 616-616	2.2	
67	The effect of temperature on the impedimetric response of bioreceptor hosting hydrogels. *Biosensors and Bioelectronics*, **2011**, 26, 2275-80	11.8	5
66	Mechanical enhancement via self-assembled nanostructures in polymer nanocomposites. *Soft Matter*, **2011**, 7, 2449	3.6	20

65	Factor XII Promotes Leukocyte Inflammation and Its Deficiency Results in Faster Wound Healing. *Blood*, **2011**, 118, 368-368	2.2	1
64	Development of a sustained fluoride delivery system. *Angle Orthodontist*, **2010**, 80, 1129-35	2.6	3
63	The use of progenitor cell/biodegradable MMP2-PLGA polymer constructs to enhance cellular integration and retinal repopulation. *Biomaterials*, **2010**, 31, 9-19	15.6	81
62	Engineering Value Propositions: Professional and Personal Needs **2010**, 137-144		2
61	Processing of polymer nanofibers through electrospinning as drug delivery systems. *Materials Chemistry and Physics*, **2009**, 113, 296-302	4.4	218
60	Electrospinning of collagen nanofiber scaffolds from benign solvents. *Macromolecular Rapid Communications*, **2009**, 30, 539-42	4.8	173
59	Encapsulation of multiple biological compounds within a single electrospun fiber. *Small*, **2009**, 5, 1508-12	11	69
58	Modulating passive micromixing in 2-D microfluidic devices via discontinuities in surface energy. *Sensors and Actuators B: Chemical*, **2009**, 140, 656-662	8.5	22
57	The design and fabrication of autonomous polymer-based surface tension-confined microfluidic platforms. *Microfluidics and Nanofluidics*, **2008**, 4, 601-611	2.8	22
56	Controlled release of ketoprofen from electrospun poly(vinyl alcohol) nanofibers. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 459, 390-396	5.3	137
55	Mechanical properties of electrospun fibrinogen structures. *Acta Biomaterialia*, **2006**, 2, 19-28	10.8	153
54	Thermal and Mechanical Characterization of Electrospun Blends of Poly(lactic acid) and Poly(glycolic acid). *Polymer Journal*, **2006**, 38, 1137-1145	2.7	45
53	Electrospun fibers from wheat protein: investigation of the interplay between molecular structure and the fluid dynamics of the electrospinning process. *Biomacromolecules*, **2005**, 6, 707-12	6.9	81
52	Correlations between electrospinnability and physical gelation. *Polymer*, **2005**, 46, 8990-9004	3.9	99
51	Electrospinning polydioxanone for biomedical applications. *Acta Biomaterialia*, **2005**, 1, 115-23	10.8	225
50	Role of chain entanglements on fiber formation during electrospinning of polymer solutions: good solvent, non-specific polymer□polymer interaction limit. *Polymer*, **2005**, 46, 3372-3384	3.9	868
49	Characterization of Proton Exchange Membrane Fuel Cells with Catalyst Layers Obtained by Electrospraying. *Electrochemical and Solid-State Letters*, **2005**, 8, A267		24
48	Improving neuron-to-electrode surface attachment via alkanethiol self-assembly: an alternating current impedance study. *Langmuir*, **2004**, 20, 7189-200	4	44

47	Biomedical Nanoscience: Electrospinning Basic Concepts, Applications, and Classroom Demonstration. *Materials Research Society Symposia Proceedings*, **2004**, 827, 171		12
46	Utilizing acid pretreatment and electrospinning to improve biocompatibility of poly(glycolic acid) for tissue engineering. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 144-52		173
45	Electrospinning collagen and elastin: preliminary vascular tissue engineering. *Frontiers in Bioscience - Landmark*, **2004**, 9, 1422-32	2.8	416
44	Electrospinning of Nanofiber Fibrinogen Structures. *Nano Letters*, **2003**, 3, 213-216	11.5	474
43	Electrospinning of poly(ethylene-co-vinyl alcohol) fibers. *Biomaterials*, **2003**, 24, 907-13	15.6	303
42	Electrospinning and Stabilization of Fully Hydrolyzed Poly(Vinyl Alcohol) Fibers. *Chemistry of Materials*, **2003**, 15, 1860-1864	9.6	281
41	Two-Phase Electrospinning from a Single Electrified Jet:Microencapsulation of Aqueous Reservoirs in Poly(ethylene-co-vinyl acetate) Fibers. *Macromolecules*, **2003**, 36, 3803-3805	5.5	160
40	Release of tetracycline hydrochloride from electrospun poly(ethylene-co-vinylacetate), poly(lactic acid), and a blend. *Journal of Controlled Release*, **2002**, 81, 57-64	11.7	1085
39	Surface-Tension-Confined Microfluidics. *Langmuir*, **2002**, 18, 948-951	4	105
38	Electrospinning of collagen nanofibers. *Biomacromolecules*, **2002**, 3, 232-8	6.9	1860
37	Industrial Applications of Inorganic Chemistry: A Junior-Senior-Level Interdisciplinary Course. *Journal of Chemical Education*, **2002**, 79, 832	2.4	7
36	NEW MATERIALS DERIVED FROM POLY(4-HYDROXYSTYRENE) AS LITHIUM BATTERY CELL COMPONENTS. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2001**, 38, 933-944	2.2	3
35	Arterial smooth muscle cell proliferation on a novel biomimicking, biodegradable vascular graft scaffold. *Journal of Biomaterials Applications*, **2001**, 16, 22-33	2.9	93
34	TAILORING TISSUE ENGINEERING SCAFFOLDS USING ELECTROSTATIC PROCESSING TECHNIQUES: A STUDY OF POLY(GLYCOLIC ACID) ELECTROSPINNING. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2001**, 38, 1231-1243	2.2	336
33	NMR Characterization of Sulfonation Blockiness in Copoly(styrenesulfonated styrene). *Macromolecules*, **2001**, 34, 3108-3110	5.5	8
32	Curing chemistry of phenylethynyl-terminated imide oligomers: Synthesis of 13C-labeled oligomers and solid-state NMR studies. *Journal of Polymer Science Part A*, **2000**, 38, 3486-3497	2.5	28
31	Electroless Gold Plating of 316 L Stainless Steel Beads. *Journal of the Electrochemical Society*, **1999**, 146, 2517-2521	3.9	13
30	A prototype electrochemical chromatographic column for use with proteins. *Analytical Chemistry*, **1999**, 71, 4272-7	7.8	4

29	Tunable electroluminescence from ionomers doped with cationic lumophores. *Electrochimica Acta*, **1998**, 43, 1623-1628	6.7	11
28	Dielectric Spectroscopy of Binary Polystyrene/Poly[styrene-b-(ethylene oxide)] Blends and Ternary Composites of Polystyrene/Poly[styrene-b-(ethylene oxide)] Swollen with Homopoly(ethylene oxide). *Macromolecules*, **1996**, 29, 5046-5049	5.5	7
27	Dielectric Spectroscopy of Polystyrene/Poly(ethylene oxide) Composites. *Macromolecules*, **1996**, 29, 5042-5045	5.5	18
26	Effect of crystallization on the morphologies of block copolymer/homopolymer blends cast in an electric field. *Journal of Polymer Science, Part B: Polymer Physics*, **1996**, 34, 309-315	2.6	5
25	Perspective: Comments on Simultaneous polymerization and formation of polyacetylene film on the surface of concentrated soluble zeigler-type catalyst solution, by Takeo Ito, Hideki Shirakawa, and Sakuji Ikeda, J. Polym. Sci.: Polym. Chem. Ed., 12, 11 (1974). *Journal of Polymer Science Part A*, **1996**, 34, 2531-2532	2.5	1
24	Towards an electrochemically modulated chromatographic stationary phase. *Journal of Chromatography A*, **1995**, 707, 29-33	4.5	8
23	Reactions of Silyl Ketene Acetal-Functionalized Polysiloxanes. Synthesis of Sulfonated Polysiloxanes. *Macromolecules*, **1994**, 27, 4080-4083	5.5	10
22	Synthesis of Polysiloxanes Bearing Cyclic Carbonate Side Chains. Dielectric Properties and Ionic Conductivities of Lithium Triflate Complexes. *Macromolecules*, **1994**, 27, 4076-4079	5.5	64
21	Phase behaviour of poly(ethylene oxide)/poly(methyl methacrylate) blends containing alkali metal salts. *Polymer*, **1993**, 34, 3241-3246	3.9	10
20	The low-energy, charge-transfer excited states of 4-amino-4-nitrodiphenyl sulfide. *Journal of Chemical Physics*, **1992**, 97, 4018-4028	3.9	4
19	Morphological variations in polymer blends made in electric fields. *Chemistry of Materials*, **1992**, 4, 1334-1343	9.6	20
18	Synthesis and reactions of silyl ketene acetal-modified polysiloxanes. Preparation and preliminary dielectric characterization of some new polysiloxanes. *Polymer*, **1992**, 33, 4191-4196	3.9	9
17	Interaction of a Cationic Protein with Electroactive Polypyrrole/poly(styrene sulfonate) and Poly(N-methylpyrrole)/poly(styrene sulfonate) Filmsa. *Annals of the New York Academy of Sciences*, **1991**, 618, 592-595	6.5	
16	Interaction of cationic polypeptides with electroactive polypyrrole/poly(styrenesulfonate) and poly(N-methylpyrrole)/poly(styrenesulfonate) films. *Macromolecules*, **1991**, 24, 5283-5287	5.5	31
15	Reactions of n-type (reduced) polyacetylene with alkyl halides. *Macromolecules*, **1988**, 21, 266-268	5.5	4
14	Electrically Conductive Polymers. *MRS Bulletin*, **1987**, 12, 36-38	3.2	2
13	A proposal for the mechanism of conduction in polyaniline. *Synthetic Metals*, **1986**, 15, 213-218	3.6	90
12	Wettability of polyacetylene: surface energetics and determination of material properties. *Langmuir*, **1986**, 2, 508-513	4	4

List of Publications

11	Introduction of hydrophilicity of polyacetylene film surfaces. *Journal of Polymer Science: Polymer Chemistry Edition*, **1985**, 23, 2601-2613		1
10	Characterization of polyacetylene by ozonolysis. *Journal of Polymer Science: Polymer Chemistry Edition*, **1983**, 21, 301-304		4
9	Characterization of polyacetylene/low density polyethylene composites prepared by in-situ polymerization. *Journal of Polymer Science: Polymer Chemistry Edition*, **1983**, 21, 2727-2737		32
8	Electron paramagnetic resonance saturation characteristics of pristine and doped polyacetylenes. *Macromolecules*, **1982**, 15, 614-621	5.5	35
7	Electrically conductive polymer composites: polymerization of acetylene in polyethylene. *Polymer*, **1982**, 23, 795-797	3.9	110
6	Electrically conducting acetylene-methylacetylene copolymers. Synthesis and properties. *Macromolecules*, **1981**, 14, 479-485	5.5	54
5	Polymerization of acetylene. *Journal of Polymer Science, Polymer Letters Edition*, **1980**, 18, 45-52		73
4	Soliton formation and cis trans isomerization in polyacetylene. *Nature*, **1980**, 285, 390-392	50.4	29
3	Electrically conducting derivative of poly(p-phenylene vinylene). *Polymer*, **1979**, 20, 1441-1443	3.9	111
2	Nascent morphology of polyacetylene. *Nature*, **1979**, 282, 286-288	50.4	52
1	Poly(Glycolic Acid)6312-6318		