

Stephen W Bigger

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2837143/stephen-w-bigger-publications-by-citations.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.

116
papers

3,120
citations

25
h-index

53
g-index

121
ext. papers

3,439
ext. citations

4
avg, IF

5.28
L-index

#	Paper	IF	Citations
116	Active Packaging Technologies with an Emphasis on Antimicrobial Packaging and its Applications. <i>Journal of Food Science</i> , 2003 , 68, 408-420	3.4	629
115	Antimicrobial properties of basil and its possible application in food packaging. <i>Journal of Agricultural and Food Chemistry</i> , 2003 , 51, 3197-207	5.7	236
114	A review of poly(lactic acid)-based materials for antimicrobial packaging. <i>Journal of Food Science</i> , 2014 , 79, R1477-90	3.4	161
113	Essential oils and their principal constituents as antimicrobial agents for synthetic packaging films. <i>Journal of Food Science</i> , 2011 , 76, R164-77	3.4	124
112	Effect of kenaf fibre loading and thymol concentration on the mechanical and thermal properties of PLA/kenaf/thymol composites. <i>Industrial Crops and Products</i> , 2014 , 61, 74-83	5.9	96
111	Antioxidant and antimicrobial properties of ethylene vinyl alcohol copolymer films based on the release of oregano essential oil and green tea extract components. <i>Journal of Food Engineering</i> , 2015 , 149, 9-16	6	90
110	Review of Mechanical Properties, Migration, and Potential Applications in Active Food Packaging Systems Containing Nanoclays and Nanosilver. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2015 , 14, 411-430	16.4	89
109	Efficacy of polyethylene-based antimicrobial films containing principal constituents of basil. <i>LWT - Food Science and Technology</i> , 2008 , 41, 779-788	5.4	83
108	Development and characterisation of HPMC films containing PLA nanoparticles loaded with green tea extract for food packaging applications. <i>Carbohydrate Polymers</i> , 2017 , 156, 108-117	10.3	78
107	Migration of antimicrobial agents from starch-based films into a food simulant. <i>LWT - Food Science and Technology</i> , 2013 , 50, 432-438	5.4	77
106	Antimicrobial activity of biodegradable polysaccharide and protein-based films containing active agents. <i>Journal of Food Science</i> , 2011 , 76, R90-R102	3.4	74
105	Oil Spill Remediation Using Magnetic Particles: An Experiment in Environmental Technology. <i>Journal of Chemical Education</i> , 1997 , 74, 1446	2.4	68
104	A Review of Property Enhancement Techniques for Carrageenan-based Films and Coatings. <i>Carbohydrate Polymers</i> , 2019 , 216, 287-302	10.3	65
103	Diffusion of linalool and methylchavicol from polyethylene-based antimicrobial packaging films. <i>LWT - Food Science and Technology</i> , 2011 , 44, 1888-1893	5.4	63
102	Characterization of antimicrobial films containing basil extracts. <i>Packaging Technology and Science</i> , 2006 , 19, 259-268	2.3	51
101	Loss of AM additives from antimicrobial films during storage. <i>Journal of Food Engineering</i> , 2011 , 105, 270-276	6	50
100	Characterizing the solid-state thermal oxidation of poly(ethylene oxide) powder. <i>Polymer</i> , 1991 , 32, 2014-2019	3.9	49

99	Release of naturally derived antimicrobial agents from LDPE films. <i>Journal of Food Science</i> , 2010 , 75, E126-33	3.4	42
98	Release of thymol from poly(lactic acid)-based antimicrobial films containing kenaf fibres as natural filler. <i>LWT - Food Science and Technology</i> , 2016 , 66, 629-637	5.4	35
97	A review of oxygen uptake techniques for measuring polyolefin oxidation. <i>Polymer Testing</i> , 1995 , 14, 211-241	4.5	34
96	Degradation of polyamide reverse osmosis membranes in the presence of chloramine. <i>Desalination</i> , 2011 , 283, 58-63	10.3	33
95	Characterising the degradation of the polymer slip additive erucamide in the presence of inorganic antiblock agents. <i>Polymer Degradation and Stability</i> , 1998 , 62, 285-290	4.7	29
94	Evaluation of the oxidative stability of multiextruded polypropylene as assessed by physicomchanical testing and simultaneous differential scanning calorimetry/chemiluminescence. <i>Journal of Applied Polymer Science</i> , 2001 , 79, 733-741	2.9	27
93	Physico-Mechanical Properties of Starch-Based Films Containing Naturally Derived Antimicrobial Agents. <i>Packaging Technology and Science</i> , 2014 , 27, 149-159	2.3	26
92	The application of simultaneous chemiluminescence and thermal analysis for studying the glass transition and oxidative stability of poly(N-vinyl-2-pyrrolidone). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1993 , 31, 287-297	2.6	25
91	New approach to the measurement of polymer photooxidation. <i>Journal of Polymer Science Part A</i> , 1987 , 25, 3311-3323	2.5	25
90	Teaching appraisal in higher education: an Australian perspective. <i>Higher Education</i> , 1997 , 34, 459-482	3	24
89	Antimicrobial activity of natural agents coated on starch-based films against <i>Staphylococcus aureus</i> . <i>Journal of Food Science</i> , 2011 , 76, M531-7	3.4	23
88	An investigation of the kinetics of cellulose degradation under non-isothermal conditions. <i>Polymer Degradation and Stability</i> , 1998 , 62, 33-40	4.7	23
87	Studying Synthetic Polymers in the Undergraduate Chemistry Curriculum. A Review of the Educational Literature. <i>Journal of Chemical Education</i> , 2001 , 78, 555	2.4	22
86	Interaction and quantification of thymol in active PLA-based materials containing natural fibers. <i>Journal of Applied Polymer Science</i> , 2016 , 133, n/a-n/a	2.9	21
85	Effects of frequency, molecular weight and thermal oxidation on the dynamic mechanical response of poly (ethylene oxide). <i>Polymer International</i> , 1991 , 26, 181-186	3.3	21
84	The effect of carbon black on the oxidative induction time of medium-density polyethylene. <i>Polymer</i> , 2000 , 41, 9123-9130	3.9	20
83	Optimisation of Cyclodextrin inclusion complexes with natural antimicrobial agents: thymol, carvacrol and linalool. <i>Journal of Microencapsulation</i> , 2018 , 35, 26-35	3.4	20
82	Cleansing Oiled Feathers [Magnetically]. <i>Marine Pollution Bulletin</i> , 1999 , 38, 219-221	6.7	19

81	Evaluation of Antifungal Activity of Antimicrobial Agents on Cheddar Cheese. <i>Packaging Technology and Science</i> , 2014 , 27, 49-58	2.3	18
80	Comparative Study of Bond Strength of Formaldehyde and Soya based Adhesive in Wood Fibre Plywood 2014 , 6, 2-9		17
79	Illustration of the principles of fluorimetry. An apparatus and experiments specially designed for the teaching laboratory. <i>Journal of Chemical Education</i> , 1992 , 69, 675	2.4	17
78	Antimicrobial Activity of Natural Agents against <i>Saccharomyces cerevisiae</i> . <i>Packaging Technology and Science</i> , 2011 , 24, 299-307	2.3	16
77	Toward an Optimized Dynamic Headspace Method for the Study of Volatiles in Low-Density Polyethylene. <i>Journal of Agricultural and Food Chemistry</i> , 1998 , 46, 1397-1405	5.7	16
76	REVIEW OF VOLATILE ORGANIC COMPOUNDS DERIVED FROM POLYETHYLENE. <i>Polymer-Plastics Technology and Engineering</i> , 2000 , 39, 845-874		15
75	Effect of chromium residues on the stability of gas-phase high-density polyethylene produced by supported catalysts. <i>Journal of Polymer Science Part A</i> , 1992 , 30, 1873-1889	2.5	15
74	The effect of hindered amine light stabilizers on the photooxidative stability of high-density polyethylene. <i>Journal of Polymer Science Part A</i> , 1989 , 27, 63-73	2.5	15
73	Reinforcement of Refined and Semi-Refined Carrageenan Film with Nanocellulose. <i>Polymers</i> , 2020 , 12,	4.5	14
72	The effects of pigments on the photostability of polyethylene. <i>Journal of Materials Science</i> , 1989 , 24, 1946-1952	4.3	14
71	Whole-bird models for the magnetic cleansing of oiled feathers. <i>Marine Pollution Bulletin</i> , 2004 , 48, 336- 40		13
70	The dependence of quinine fluorescence quenching on ionic strength. <i>International Journal of Chemical Kinetics</i> , 1996 , 28, 919-923	1.4	13
69	Characterization of Semi-refined Carrageenan-Based Film for Primary Food Packaging Purposes. <i>Journal of Polymers and the Environment</i> , 2018 , 26, 3754-3761	4.5	13
68	Optical, structural, mechanical and thermal characterization of antioxidant ethylene vinyl alcohol copolymer films containing betalain-rich beetroot. <i>Food Packaging and Shelf Life</i> , 2020 , 24, 100502	8.2	12
67	Achievement of 100% Removal of Oil from Feathers Employing Magnetic Particle Technology. <i>Journal of Environmental Engineering, ASCE</i> , 2006 , 132, 555-559	2	12
66	University-led STEM outreach programs: purposes, impacts, stakeholder needs and institutional support at nine Australian universities. <i>Studies in Higher Education</i> , 2018 , 43, 586-599	2.6	11
65	Effect of thermal oxidation on the spherulitic morphology of high-density polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1991 , 29, 795-804	2.6	11
64	Staining techniques for detecting localized oxidation in high density polyethylene powders and films. <i>Polymer International</i> , 1991 , 26, 187-193	3.3	11

63	Effect of supercritical CO ₂ and olive leaf extract on the structural, thermal and mechanical properties of an impregnated food packaging film. <i>Journal of Supercritical Fluids</i> , 2019 , 145, 181-191	4.2	11
62	The influence of chemically treated natural fibers in poly(lactic acid) composites containing thymol. <i>Polymer Composites</i> , 2018 , 39, 1261-1272	3	10
61	Universities Conducting STEM Outreach: a Conceptual Framework. <i>Higher Education Quarterly</i> , 2016 , 70, 419-448	1.3	10
60	Water sorption and physicochemical properties of corn starch-based films. <i>Journal of Applied Polymer Science</i> , 2013 , 128, 530-536	2.9	10
59	Effect of Poly(Lactic Acid)/Kenaf Composites Incorporated with Thymol on the Antimicrobial Activity of Processed Meat. <i>Journal of Food Processing and Preservation</i> , 2017 , 41, e13145	2.1	10
58	Magnetic particle technology in environmental remediation and wildlife rehabilitation. <i>The Environmentalist</i> , 2007 , 27, 175-182		10
57	Method Dependency in the Measurement of BTEX Levels in Contaminated Soil. <i>Journal of Soils and Sediments</i> , 2002 , 2, 137-142	3.4	10
56	Use of a Dynamic Headspace GC-MS Method for the Study of Volatile Organic Compounds in Polyethylene Packaging. An Undergraduate Experiment in Polymer Analysis. <i>Journal of Chemical Education</i> , 2000 , 77, 1631	2.4	10
55	Efficiency of processing stabilizers using a micro-oxygen uptake technique. <i>Polymer</i> , 1989 , 30, 2080-2086	9.9	10
54	Photophysics of 6-(2-hydroxy-4-methoxyphenyl)-s-triazine photostabilizers. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1987 , 40, 391-399	4.7	10
53	A Fluorometric Approach to Studying the Effects of Ionic Strength on Reaction Rates: An Undergraduate Steady-State Fluorescence Laboratory Experiment. <i>Journal of Chemical Education</i> , 2003 , 80, 1191	2.4	9
52	Quantitative analysis of polyethylene blends by Fourier transform infrared spectroscopy. <i>Applied Spectroscopy</i> , 2003 , 57, 928-32	3.1	9
51	Temperature dependence of fluorescence from polymer-bound 2-(2-hydroxyphenyl)-2H-benzotriazole photostabilizers. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1991 , 55, 387-393	4.7	9
50	Comparative study of the structural, morphological and oxidative characteristics of high-density polyethylene and poly(ethylene oxide). <i>European Polymer Journal</i> , 1991 , 27, 1111-1120	5.2	9
49	Effect of light intensity on the photooxidation kinetics of high-density polyethylene. <i>Journal of Polymer Science Part A</i> , 1992 , 30, 2277-2280	2.5	9
48	Two novel algorithms for the thermogravimetric assessment of polymer degradation under non-isothermal conditions. <i>Polymer Testing</i> , 2015 , 43, 139-146	4.5	8
47	Effect of Metallocene-Catalyzed Polyethylene on the Physicochemical Properties of Blends with High-Density Polyethylene or Low-Density Polyethylene. <i>Polymer-Plastics Technology and Engineering</i> , 2009 , 48, 272-279		8
46	Extraction of Hydrocarbons from Clay Soils by Sonication and Soxhlet Techniques.. <i>Sekiyu Gakkaishi (Journal of the Japan Petroleum Institute)</i> , 2001 , 44, 378-383		8

45	Flash-photolysis study of the 4-(methyl sulphonate)-benzophenone ketyl radical anion in alcohol/water mixtures. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1990 , 86, 619-622		8
44	A new approach to quantitatively assessing the effects of polymer additives. <i>Polymer</i> , 2002 , 43, 4611-4618	3.9	7
43	Acute temperature dependency in the cleansing of tarry feathers utilizing magnetic particles. <i>Environmental Chemistry Letters</i> , 2005 , 3, 25-27	13.3	7
42	Photophysics of a sulfonated 2-hydroxyphenylbenzotriazole UV absorber in solution and in polymer substrates. <i>Journal of Polymer Science Part A</i> , 1987 , 25, 1619-1631	2.5	7
41	Quinine fluorescence quenching at low ionic strength. <i>International Journal of Chemical Kinetics</i> , 2000 , 32, 473-477	1.4	6
40	Fluorescence anisotropy measurements in undergraduate teaching. <i>Journal of Chemical Education</i> , 1993 , 70, A234	2.4	6
39	Novel theoretical and computer-assisted modeling of isothermal and non-isothermal depolymerization kinetics. <i>Polymer Testing</i> , 2015 , 44, 1-7	4.5	5
38	Improving the moisture barrier and mechanical properties of semi-refined carrageenan films. <i>Journal of Applied Polymer Science</i> , 2020 , 137, 49238	2.9	5
37	Non-isothermal depolymerisation kinetics of poly(ethylene oxide). <i>Polymer Degradation and Stability</i> , 2011 , 96, 1497-1502	4.7	5
36	Magnetic cleansing of weathered/tarry oiled feathers--the role of pre-conditioners. <i>Marine Pollution Bulletin</i> , 2006 , 52, 1591-4	6.7	5
35	The Effect of Metallocene-Catalyzed Polyethylene on the Physicomechanical Properties of Film Blends with Conventional Linear Low-Density Polyethylene. <i>Journal of Plastic Film and Sheeting</i> , 2006 , 22, 121-132	2.4	5
34	Removal of petroleum tar from bird feathers utilizing magnetic particles. <i>Environmental Chemistry Letters</i> , 2006 , 4, 111-113	13.3	5
33	The second time derivative analysis of chemiluminescence emission profiles and its application to the accurate determination of oxidative induction times. <i>Journal of Applied Polymer Science</i> , 2001 , 79, 1986-1993	2.9	5
32	A Student Experiment in Non-Isothermal Chemical Kinetics. <i>Journal of Chemical Education</i> , 1998 , 75, 1150-4	2.4	5
31	Effect of selenium on the thermal oxidation and oxidative pyrolysis of high-density polyethylene. <i>Polymer Degradation and Stability</i> , 1992 , 38, 23-26	4.7	5
30	REVIEW OF ZEOLITES AS DEODORANTS FOR POLYETHYLENE RESINS USED IN FOOD PACKAGING APPLICATIONS. <i>Polymer-Plastics Technology and Engineering</i> , 2002 , 41, 795-818		5
29	A Framework for Food Traceability Information Extraction Based on a Video Surveillance System. <i>Procedia Computer Science</i> , 2015 , 55, 1285-1292	1.6	4
28	An investigation into the removal of oil from rock utilising magnetic particle technology. <i>Marine Pollution Bulletin</i> , 2007 , 54, 1958-61	6.7	4

27	The Effect of Downgauging on the Physicomechanical Properties of Film Blends of Linear Low-density Polyethylene with Low-density Polyethylene. <i>Journal of Elastomers and Plastics</i> , 2005 , 37, 229-246	1.6	4
26	Identifying Deficiencies in the Environmental Chemistry Educational Literature. <i>Journal of Chemical Education</i> , 2001 , 78, 1693	2.4	4
25	FluSpec: A Simulated Experiment in Fluorescence Spectroscopy. <i>Journal of Chemical Education</i> , 2014 , 91, 1081-1083	2.4	3
24	ChemKinetics: Fundamental Chemical Kinetics Principles and Analysis by Computer Simulation. <i>Journal of Chemical Education</i> , 2011 , 88, 244-244	2.4	3
23	Colour changes in pigmented Nylon-6 systems containing copper iodide. <i>Polymer Degradation and Stability</i> , 2008 , 93, 1711-1714	4.7	3
22	Simple Heat Flow Measurements: A Closer Look at Polystyrene Cup Calorimeters. <i>Journal of Chemical Education</i> , 1994 , 71, 793	2.4	3
21	Effects of temperature and the partial pressure of oxygen on the rate of photooxidation of polyethylene. <i>Polymer</i> , 1988 , 29, 1277-1281	3.9	3
20	Towards a quantitative indicator of feather disruption following the cleansing of oiled birds. <i>Marine Pollution Bulletin</i> , 2017 , 120, 268-273	6.7	2
19	Mathematical Model for the Sequestering of Chemical Contaminants by Magnetic Particles. <i>Journal of Environmental Engineering, ASCE</i> , 2010 , 136, 1255-1259	2	2
18	Application of chemiluminescence to probe miscibility in metallocene-catalyzed polyethylene blends. <i>Journal of Applied Polymer Science</i> , 2003 , 89, 3006-3015	2.9	2
17	Studying Thermally Induced Chemical and Physical Transformations in Common Synthetic Polymers: A Laboratory Project. <i>Journal of Chemical Education</i> , 2000 , 77, 745	2.4	2
16	SHELPAS a rapid means of student evaluation of lecturing performance in higher education. <i>Assessment and Evaluation in Higher Education</i> , 1995 , 20, 191-202	3.1	2
15	Electron transfer from the benzophenone ketyl radical anion to 9,10-anthraquinone-2-sulphonate and methylviologen in water-propan-2-ol mixtures. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1988 , 44, 19-28	4.7	2
14	FluAnisot: A Simulated Experiment in Fluorescence Anisotropy Measurement. <i>Journal of Chemical Education</i> , 2013 , 90, 386-387	2.4	1
13	Mathematical Model for Sequential Pickup of Chemical Contaminants by Magnetic Particles. <i>Journal of Environmental Engineering, ASCE</i> , 2013 , 139, 796-802	2	1
12	Spec UV-Vis: An Ultraviolet-Visible Spectrophotometer Simulation. <i>Journal of Chemical Education</i> , 2001 , 78, 1560	2.4	1
11	MacMS: A Mass Spectrometer Simulator: Abstract of Issue 9906M. <i>Journal of Chemical Education</i> , 1999 , 76, 1464	2.4	1
10	Characterization of oligomeric by-products produced during the high-pressure polymerization of ethylene. <i>European Polymer Journal</i> , 1996 , 32, 487-492	5.2	1

9	3D Model-Based Food Traceability Information Extraction Framework. <i>Lecture Notes in Computer Science</i> , 2015 , 112-119	0.9	1
8	FlashPhotol: Using a Flash Photolysis Apparatus Simulator To Introduce Students to the Kinetics of Transient Species and Fast Reactions. <i>Journal of Chemical Education</i> , 2016 , 93, 1475-1477	2.4	1
7	Effects of surface photocrosslinking on the properties of semi-refined carrageenan film. <i>Food Hydrocolloids</i> , 2021 , 111, 106196	10.6	1
6	The dependence of quinine fluorescence quenching on ionic strength 1996 , 28, 919		1
5	The kinetics of the reduction of methyl viologen and 9,10-anthraquinone-2-sulfonate by the benzopinacol anion. <i>International Journal of Chemical Kinetics</i> , 1992 , 24, 689-693	1.4	0
4	Monte Carlo Approach to Generating the Probability-Distribution Function of a Classical Harmonic Oscillator. <i>Journal of Chemical Education</i> , 1996 , 73, 724	2.4	
3	Thermal and photooxidative studies of polyethylene. <i>Makromolekulare Chemie Macromolecular Symposia</i> , 1993 , 70-71, 445-452		
2	A Comparison between Field and Laboratory Methods for Measuring Volatile Organic Contaminants in Soil.. <i>Journal of the Japan Petroleum Institute</i> , 2002 , 45, 271-278		1
1	Melt Stability of Starch-Filled LDPE during Multi-Pass Extrusion Determined by Melt-Flow and Non-Isothermal Thermogravimetric Investigations. <i>ACS Symposium Series</i> , 2018 , 115-136	0.4	