Thomas Farmer

List of Publications by Year
in descending order

71 papers	3,879 citations	159525 30 h-index	123376 61 g-index
76 all docs	76 docs citations	76 times ranked	4943 citing authors

#	Article	IF	Citations
1	An experimental investigation into the kinetics and mechanism of the aza-Michael additions of dimethyl itaconate. Tetrahedron, 2022, , 132921.	1.0	3
2	Simple and modestly scalable synthesis of. Australian Journal of Chemistry, 2022, 75, 331-344.	0.5	3
3	A class of surfactants via PEG modification of the oleate moiety of lactonic sophorolipids: synthesis, characterisation and application. Green Chemistry, 2021, 23, 9906-9915.	4.6	12
4	Rapid â€œhighâ€•temperature batch and flow lithiation-trapping of N-Boc pyrrolidine. Tetrahedron, 2021, 81, 131899.	1.0	7
5	Greenness Assessment and Synthesis for the Bio-Based Production of the Solvent 2,2,5,5-Tetramethyloxolane (TMO). Sustainable Chemistry, 2021, 2, 392-406.	2.2	5
6	Enzyme-catalyzed synthesis of malonate polyesters and their use as metal chelating materials. Green Chemistry, 2021, 23, 5043-5048.	4.6	4
7	2,2,5,5-Tetramethyloxolane (TMO) as a Solvent for Buchwaldâ€“Hartwig Aminations. ACS Sustainable Chemistry and Engineering, 2021, 9, 17330-17337.	3.2	8
8	Workâ€hardening Photopolymer from Renewable Photoactive 3,3â€™â€(2,5â€Furandiyl)bisacrylic Acid. ChemSusChem, 2020, 13, 4140-4150.	3.6	6
9	Sustainable Single-Stage Solidâ€“Liquid Extraction of Hesperidin and Rutin from Agro-Products Using Cyrene. ACS Sustainable Chemistry and Engineering, 2020, 8, 18245-18257.	3.2	37
10	Effects of Methyl Branching on the Properties and Performance of Furandioate-Adipate Copolyesters of Bio-Based Secondary Diols. ACS Sustainable Chemistry and Engineering, 2020, 8, 14471-14483.	3.2	18
11	A Family of Waterâ€Immiscible, Dipolar Aprotic, Diamide Solvents from Succinic Acid. ChemSusChem, 2020, 13, 3212-3221.	3.6	6
12	Editorial: From Biomass to Advanced Bio-Based Chemicals & Materials: A Multidisciplinary Perspective. Frontiers in Chemistry, 2020, 8, 131.	1.8	6
13	Enzymatic synthesis of biobased polyesters utilizing aromatic diols as the rigid component. European Polymer Journal, 2020, 130, 109680.	2.6	24
14	Thermal Upgrade of Enzymatically Synthesized Aliphatic and Aromatic Oligoesters. Materials, 2020, 13, 368.	1.3	14
15	Fabrication of PES/PVP Water Filtration Membranes Using CyreneÂ®, a Safer Bio-Based Polar Aprotic Solvent. Advances in Polymer Technology, 2019, 2019, 1-15.	0.8	52
16	Improving the Post-polymerization Modification of Bio-Based Itaconate Unsaturated Polyesters: Catalyzing Aza-Michael Additions With Reusable Iodine on Acidic Alumina. Frontiers in Chemistry, 2019, 7, 501.	1.8	11
17	The Autoxidation of Alkenyl Succinimidesâ€”Mimics for Polyisobutenyl Succinimide Dispersants. Industrial & Engineering Chemistry Research, 2019, 58, 19649-19660.	1.8	6
18	Sustainable Galactarateâ€Based Polymers: Multiâ€Enzymatic Production of Pectinâ€Derived Polyesters. Macromolecular Rapid Communications, 2019, 40, e1900361.	2.0	14

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19	A comparison of the solvation power of the green solvent 2,2,5,5-tetramethyloxolane versus toluene via partition coefficients. Journal of Cleaner Production, 2019, 240, 118175.	4.6	8
20	Modification of bio-based Î²-diketone from wheat straw wax: synthesis of polydentate lipophilic super-chelators for enhanced metal recovery. RSC Advances, 2019, 9, 3542-3549.	1.7	2
21	Enzymatic synthesis of unsaturated polyesters: functionalization and reversibility of the aza-Michael addition of pendants. Polymer Chemistry, 2019, 10, 843-851.	1.9	46
22	Synthesis of Biobased Diethyl Terephthalate via Dielsâ€“Alder Addition of Ethylene to 2,5-Furandicarboxylic Acid Diethyl Ester: An Alternative Route to 100% Biobased Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 61	3.2	39
23	BioLogicTool: A Simple Visual Tool for Assisting in the Logical Selection of Pathways from Biomass to Products. Industrial & Engineering Chemistry Research, 2019, 58, 15945-15957.	1.8	13
24	Recent Advances on Enzymatic Catalysis as a Powerful Tool for the Sustainable Synthesis of Bio-Based Polyesters. , 2019, , 555-570.		1
25	Enzymatic synthesis of lignin derivable pyridine based polyesters for the substitution of petroleum derived plastics. Nature Communications, 2019, 10, 1762.	5.8	58
26	Safer bio-based solvents to replace toluene and tetrahydrofuran for the biocatalyzed synthesis of polyesters. Green Chemistry, 2019, 21, 1686-1694.	4.6	50
27	Rapid Ringâ€Opening Metathesis Polymerization of Monomers Obtained from Biomassâ€Derived Furfuryl Amines and Maleic Anhydride. ChemSusChem, 2019, 12, 2393-2401.	3.6	8
28	Postâ€polymerization modification of bioâ€based polymers: maximizing the high functionality of polymers derived from biomass. Polymer International, 2018, 67, 775-789.	1.6	62
29	Synthesis, chemistry, physicochemical properties and industrial applications of amino acid surfactants: A review. Comptes Rendus Chimie, 2018, 21, 112-130.	0.2	126
30	Optimization of Amidation Reactions Using Predictive Tools for the Replacement of Regulated Solvents with Safer Biobased Alternatives. ACS Sustainable Chemistry and Engineering, 2018, 6, 1550-1554.	3.2	14
31	Valorization of spruce needle waste via supercritical extraction of waxes and facile isolation of nonacosan-10-ol. Journal of Cleaner Production, 2018, 171, 557-566.	4.6	19
32	Greening the esterification between isosorbide and acetic acid. Sustainable Chemistry and Pharmacy, 2018, 7, 41-49.	1.6	8
33	Efficient Physisorption of Candida Antarctica Lipase B on Polypropylene Beads and Application for Polyester Synthesis. Catalysts, 2018, 8, 369.	1.6	19
34	Facile and rapid decarboxylation of glutamic acid to Î³-aminobutyric acid via microwave-assisted reaction: Towards valorisation of waste gluten. Journal of Cleaner Production, 2018, 205, 1102-1113.	4.6	21
35	Chemo-enzymatic strategies for the synthesis of functional bio-based polyesters. New Biotechnology, 2018, 44, S64.	2.4	0
36	Catalyst: Possible Consequences of the N-Methyl Pyrrolidone REACH Restriction. CheM, 2018, 4, 2010-2012.	5.8	37

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37	Renewable Selfâ€Blowing Nonâ€Isocyanate Polyurethane Foams from Lysine and Sorbitol. European Journal of Organic Chemistry, 2018, 2018, 4265-4271.	1.2	53
38	A methodical selection process for the development of ketones and esters as bio-based replacements for traditional hydrocarbon solvents. Green Chemistry, 2018, 20, 4003-4011.	4.6	26
39	Elucidating enzymatic polymerisations: Chain-length selectivity of Candida antarctica lipase B towards various aliphatic diols and dicarboxylic acid diesters. European Polymer Journal, 2018, 106, 79-84.	2.6	55
40	Insights into postâ€polymerisation modification of bioâ€based unsaturated itaconate and fumarate polyesters via azaâ€michael addition: Understanding the effects of Cï¿¾C isomerisation. Journal of Polymer Science Part A, 2018, 56, 1935-1945.	2.5	32
41	Wholly biomass derivable sustainable polymers by ring-opening metathesis polymerisation of monomers obtained from furfuryl alcohol and itaconic anhydride. Polymer Chemistry, 2017, 8, 3074-3081.	1.9	14
42	Synergistic chemoâ€enzymatic hydrolysis of poly(ethylene terephthalate) from textile waste. Microbial Biotechnology, 2017, 10, 1376-1383.	2.0	85
43	Bio-based materials: general discussion. Faraday Discussions, 2017, 202, 121-139.	1.6	3
44	2,2,5,5-Tetramethyltetrahydrofuran (TMTHF): a non-polar, non-peroxide forming ether replacement for hazardous hydrocarbon solvents. Green Chemistry, 2017, 19, 3671-3678.	4.6	52
45	New bio-based monomers: tuneable polyester properties using branched diols from biomass. Faraday Discussions, 2017, 202, 61-77.	1.6	44
46	Electrochemical Coupling of Biomassâ€Derived Acids: New C₈ Platforms for Renewable Polymers and Fuels. ChemSusChem, 2017, 10, 166-170.	3.6	35
47	High-Yield Production of Levulinic Acid from Pretreated Cow Dung in Dilute Acid Aqueous Solution. Molecules, 2017, 22, 285.	1.7	17
48	Recirculation: A New Concept to Drive Innovation in Sustainable Product Design for Bio-Based Products. Molecules, 2017, 22, 48.	1.7	33
49	On the Effect of Microwave Energy on Lipase-Catalyzed Polycondensation Reactions. Molecules, 2016, 21, 1245.	1.7	17
50	A new perspective in bio-refining: levoglucosenone and cleaner lignin from waste biorefinery hydrolysis lignin by selective conversion of residual saccharides. Energy and Environmental Science, 2016, 9, 2571-2574.	15.6	79
51	Tools and techniques for solvent selection: green solvent selection guides. Sustainable Chemical Processes, 2016, 4, .	2.3	837
52	N-Butylpyrrolidinone as a dipolar aprotic solvent for organic synthesis. Green Chemistry, 2016, 18, 3990-3996.	4.6	81
53	Circular economy design considerations for research and process development in the chemical sciences. Green Chemistry, 2016, 18, 3914-3934.	4.6	239
54	Rapid and efficient biphasic liquid extraction of metals with bio-derived lipophilic Î²-diketone. RSC Advances, 2016, 6, 95789-95792.	1.7	7

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55	Intelligent Approach to Solvent Substitution: The Identification of a New Class of Levoglucosenone Derivatives. ChemSusChem, 2016, 9, 3503-3512.	3.6	38
56	Ring opening metathesis polymerisation of a new bio-derived monomer from itaconic anhydride and furfuryl alcohol. Green Chemistry, 2016, 18, 3945-3948.	4.6	28
57	Post-polymerisation modification of bio-derived unsaturated polyester resins via Michael additions of 1,3-dicarbonyls. Polymer Chemistry, 2016, 7, 1650-1658.	1.9	45
58	Processed Lignin as a Byproduct of the Generation of 5â€(Chloromethyl)furfural from Biomass: A Promising New Mesoporous Material. ChemSusChem, 2015, 8, 4172-4179.	3.6	12
59	Synthesis of Unsaturated Polyester Resins from Various Bio-Derived Platform Molecules. International Journal of Molecular Sciences, 2015, 16, 14912-14932.	1.8	98
60	Opportunities for Bio-Based Solvents Created as Petrochemical and Fuel Products Transition towards Renewable Resources. International Journal of Molecular Sciences, 2015, 16, 17101-17159.	1.8	177
61	Bio-derived materials as a green route for precious & critical metal recovery and re-use. Green Chemistry, 2015, 17, 1951-1965.	4.6	220
62	The potential of microwave technology for the recovery, synthesis and manufacturing of chemicals from bio-wastes. Catalysis Today, 2015, 239, 80-89.	2.2	70
63	p-Cymenesulphonyl Chloride: A Bio-Based Activating Group and Protecting Group for Greener Organic Synthesis. Journal of the Brazilian Chemical Society, 2015, , .	0.6	0
64	Chapter 1. Elemental Sustainability for Catalysis. RSC Green Chemistry, 2015, , 1-14.	0.0	2
65	Dihydrolevoglucosenone (Cyrene) as a bio-based alternative for dipolar aprotic solvents. Chemical Communications, 2014, 50, 9650-9652.	2.2	329
66	Using metrics and sustainability considerations to evaluate the use of bio-based and non-renewable BrÃ¸nsted acidic ionic liquids to catalyse Fischer esterification reactions. Sustainable Chemical Processes, 2013, 1, .	2.3	14
67	Microwave heating for rapid conversion of sugars and polysaccharides to 5-chloromethyl furfural. Green Chemistry, 2013, 15, 72-75.	4.6	50
68	Elemental Sustainability and the Importance of Scarce Element Recovery. RSC Green Chemistry, 2013, , 1-28.	0.0	33
69	Mesoporous structured silica â€“ An improved catalyst for direct amide synthesis and its application to continuous flow processing. Arkivoc, 2013, 2012, 282-293.	0.3	15
70	The Derivatization of Bioplatform Molecules by using KF/Alumina Catalysis. ChemSusChem, 2009, 2, 1025-1027.	3.6	25
71	The integration of green chemistry into future biorefineries. Biofuels, Bioproducts and Biorefining, 2009, 3, 72-90.	1.9	199