Richard J Murphy

List of Publications by Year
in descending order

103	10,414	87843 38	32815 100
papers	citations	h-index	g-index

104	104	104	13476
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Path Forward for Biofuels and Biomaterials. Science, 2006, 311, 484-489.	6.0	4,935
2	Biodegradable and compostable alternatives to conventional plastics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 2127-2139.	1.8	642
3	Ionic liquid pretreatment of lignocellulosic biomass with ionic liquidâ€“water mixtures. Green Chemistry, 2011, 13, 2489.	4.6	422
4	The effect of the ionic liquid anion in the pretreatment of pine wood chips. Green Chemistry, 2010, 12, 672.	4.6	294
5	Leaching of chromated copper arsenate wood preservatives: a review. Environmental Pollution, 2001, 111, 53-66.	3.7	280
6	Energy and the food system. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2991-3006.	1.8	257
7	LCA data quality: Sensitivity and uncertainty analysis. Science of the Total Environment, 2012, 435-436, 230-243.	3.9	192
8	Greenhouse gas emissions from four bioenergy crops in England and Wales: Integrating spatial estimates of yield and soil carbon balance in life cycle analyses. GCB Bioenergy, 2009, 1, 267-281.	2.5	146
9	Role of bioenergy, biorefinery and bioeconomy in sustainable development: Strategic pathways for Malaysia. Renewable and Sustainable Energy Reviews, 2018, 81, 1966-1987.	8.2	120
10	Environmental sustainability of bioethanol production from wheat straw in the UK. Renewable and Sustainable Energy Reviews, 2013, 28, 715-725.	8.2	116
11	Vitamin D and SARS-CoV-2 virus/COVID-19 disease. BMJ Nutrition, Prevention and Health, 2020, 3, 106-110.	1.9	116
12	Global developments in the competition for land from biofuels. Food Policy, 2011, 36, S52-S61.	2.8	104
13	Life cycle assessment of two alternative bioenergy systems involving Salix spp. biomass: Bioethanol production and power generation. Applied Energy, 2012, 95, 111-122.	5.1	101
14	Biomass Characterization of Buddleja davidii: A Potential Feedstock for Biofuel Production. Journal of Agricultural and Food Chemistry, 2009, 57, 1275-1281.	2.4	97
15	Life cycle assessment of wastewater treatment technologies treating petroleum process waters. Science of the Total Environment, 2006, 367, 58-70.	3.9	92
16	Effect of Ethanol Organosolv Pretreatment on Enzymatic Hydrolysis of Buddleja davidii Stem Biomass. Industrial & Engineering Chemistry Research, 2010, 49, 1467-1472.	1.8	90
17	Brown rot fungal early stage decay mechanism as a biological pretreatment for softwood biomass in biofuel production. Biomass and Bioenergy, 2010, 34, 1257-1262.	2.9	87
18	Energy and greenhouse gas balance of the use of forest residues for bioenergy production in the UK. Biomass and Bioenergy, 2011, 35, 4581-4594.	2.9	85

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19	Techno-economic potential of bioethanol from bamboo in China. Biotechnology for Biofuels, 2013, 6, 173.	6.2	83
20	Production of copper oxalate by some copper tolerant fungi. Transactions of the British Mycological Society, 1983, 81, 165-168.	0.6	81
21	Comparative life cycle assessment of ethanol production from fast-growing wood crops (black) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.9	80
22	The Challenges of Applying Planetary Boundaries as a Basis for Strategic Decision-Making in Companies with Global Supply Chains. Sustainability, 2017, 9, 279.	1.6	78
23	Bioethanol production from various waste papers: Economic feasibility and sensitivity analysis. Applied Energy, 2013, 111, 1172-1182.	5.1	76
24	A Life Cycle Assessment (LCA) comparison of three management options for waste papers: Bioethanol production, recycling and incineration with energy recovery. Bioresource Technology, 2012, 120, 89-98.	4.8	71
25	High-solids loading enzymatic hydrolysis of waste papers for biofuel production. Applied Energy, 2012, 99, 23-31.	5.1	69
26	Present and future environmental impact of poplar cultivation in the Po Valley (Italy) under different crop management systems. Journal of Cleaner Production, 2012, 26, 56-66.	4.6	65
27	Environmental assessment of energy production based on long term commercial willow plantations in Sweden. Science of the Total Environment, 2012, 421-422, 210-219.	3.9	63
28	Developmental Changes in Cell Wall Structure of Phloem Fibres of the Bamboo Dendrocalamus asper. Annals of Botany, 2004, 94, 497-505.	1.4	59
29	Technology performance and economic feasibility of bioethanol production from various waste papers. Energy and Environmental Science, 2012, 5, 5717-5730.	15.6	57
30	Importance of policy support and feedstock prices on economic feasibility of bioethanol production from wheat straw in the UK. Renewable and Sustainable Energy Reviews, 2013, 17, 291-300.	8.2	57
31	A Life Cycle Engineering Perspective on Biocomposites as a Solution for a Sustainable Recovery. Sustainability, 2021, 13, 1160.	1.6	56
32	Variation in Cell Wall Composition and Accessibility in Relation to Biofuel Potential of Short Rotation Coppice Willows. Bioenergy Research, 2012, 5, 685-698.	2.2	48
33	Translation of Earth observation data into sustainable development indicators: An analytical framework. Sustainable Development, 2019, 27, 366-376.	6.9	48
34	Secondâ€generation bioâ€based plastics are becoming a reality â€“ Nonâ€renewable energy and greenhouse gas (GHG) balance of succinic acidâ€based plastic end products made from lignocellulosic biomass. Biofuels, Bioproducts and Biorefining, 2018, 12, 426-441.	1.9	47
35	QTL Mapping of Enzymatic Saccharification in Short Rotation Coppice Willow and Its Independence from Biomass Yield. Bioenergy Research, 2010, 3, 251-261.	2.2	46
36	Ultrastructure of Fibre and Parenchyma Cell Walls During Early Stages of Culm Development in Dendrocalamus asper. Annals of Botany, 2005, 95, 619-629.	1.4	45

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37	The environmental profile of bioethanol produced from current and potential future poplar feedstocks in the EU. Green Chemistry, 2014, 16, 4680-4695.	4.6	45
38	Eco-innovation of a wooden childhood furniture set: An example of environmental solutions in the wood sector. Science of the Total Environment, 2012, 426, 318-326.	3.9	42
39	Life Cycle Assessment and sustainability methodologies for assessing industrial crops, processes and end products. Industrial Crops and Products, 2011, 34, 1332-1339.	2.5	38
40	Biofuels carbon footprints: Whole-systems optimisation for GHG emissions reduction. Bioresource Technology, 2011, 102, 7457-7465.	4.8	37
41	Physical and mechanical properties of flame retardant urea formaldehyde medium density fiberboard. Journal of Materials Processing Technology, 2009, 209, 635-640.	3.1	36
42	Reaction wood â€“ a key cause of variation in cell wall recalcitrance in willow. Biotechnology for Biofuels, 2012, 5, 83.	6.2	36
43	Life cycle assessment of potential energy uses for short rotation willow biomass in Sweden. International Journal of Life Cycle Assessment, 2013, 18, 783-795.	2.2	36
44	Methodological analysis of palm oil biodiesel life cycle studies. Renewable and Sustainable Energy Reviews, 2018, 94, 694-704.	8.2	36
45	Soaking of pine wood chips with ionic liquids for reduced energy input during grinding. Green Chemistry, 2012, 14, 1079.	4.6	35
46	Environmental sustainability of bioethanol production from waste papers: sensitivity to the system boundary. Energy and Environmental Science, 2012, 5, 8281.	15.6	34
47	Investigation of tension wood formation and 2,6-dichlorbenzonitrile application in short rotation coppice willow composition and enzymatic saccharification. Biotechnology for Biofuels, 2011, 4, 13.	6.2	33
48	The energy efficiency behaviour of individuals in large organisations: A case study of a major UK infrastructure operator. Energy Policy, 2017, 104, 38-49.	4.2	33
49	Anaerobic digestion of starchâ€“polyvinyl alcohol biopolymer packaging: Biodegradability and environmental impact assessment. Bioresource Technology, 2011, 102, 11137-11146.	4.8	32
50	Electron Paramagnetic Resonance (EPR) Spectroscopic Analysis of Copper Based Preservatives inPinus sylvestris. Holzforschung, 1994, 48, 91-98.	0.9	31
51	Is it possible to develop biopolymer production systems independent of fossil fuels? Case study in energy profiling of polyhydroxybutyrate-valerate (PHBV). Green Chemistry, 2013, 15, 706.	4.6	30
52	Bioethanol from poplar: a commercially viable alternative to fossil fuel in the European Union. Biotechnology for Biofuels, 2014, 7, 113.	6.2	30
53	X-ray micro-computed tomography in willow reveals tissue patterning of reaction wood and delay in programmed cell death. BMC Plant Biology, 2015, 15, 83.	1.6	30
54	Investigation of the extracellular mucilaginous materials produced by some wood decay fungi. Mycological Research, 1999, 103, 1453-1461.	2.5	28

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55	Developing database criteria for the assessment of biomass supply chains for biorefinery development. Chemical Engineering Research and Design, 2016, 107, 253-262.	2.7	27
56	Seeing Sustainability from Space: Using Earth Observation Data to Populate the UN Sustainable Development Goal Indicators. Sustainability, 2019, 11, 5062.	1.6	27
57	Correlation between anatomical characteristics of ethanol organosolv pretreated Buddleja davidii and its enzymatic conversion to glucose. Biotechnology and Bioengineering, 2010, 107, 795-801.	1.7	24
58	Fibre Maturation in the Bamboo Gigantochloa Scortechinii. IAWA Journal, 1997, 18, 147-156.	2.7	23
59	Influence of Agro-Ecosystem Modeling Approach on the Greenhouse Gas Profiles of Wheat-Derived Biopolymer Products. Environmental Science & Technology, 2012, 46, 320-330.	4.6	20
60	The importance of the short-term leaching dynamics of wood preservatives. Chemosphere, 2002, 47, 517-523.	4.2	19
61	The protective role of the extracellular mucilaginous material (ECMM) from two wood-rotting basidiomycetes against copper toxicity. International Biodeterioration and Biodegradation, 2007, 60, 1-7.	1.9	17
62	Insights into nitrogen allocation and recycling from nitrogen elemental analysis and 15N isotope labelling in 14 genotypes of willow. Tree Physiology, 2014, 34, 1252-1262.	1.4	17
63	Bioethanol from poplar clone Imola: an environmentally viable alternative to fossil fuel?. Biotechnology for Biofuels, 2015, 8, 134.	6.2	17
64	Microfibril orientation in differentiating and maturing fibre and parenchyma cell walls in culms of bamboo ((Carr.) Riv. & Riv.). Botanical Journal of the Linnean Society, 2000, 134, 339-359.	0.8	15
65	Microdistribution of Some Copper and Zinc Containing Waterborne and Organic Solvent Wood Preservatives in Spruce Wood Cell Walls. Holzforschung, 2000, 54, 23-26.	0.9	15
66	Fungicides affect the production of extracellular mucilaginous material (ECMM) and the peripheral growth unit (PGU) in two wood-rotting basidiomycetes. Mycological Research, 2006, 110, 1207-1213.	2.5	15
67	Assessment of technical and environmental performances of wheatâ€based foams in thermal packaging applications. Packaging Technology and Science, 2010, 23, 363-382.	1.3	15
68	Is There a Generic Environmental Advantage for Starchâ€“PVOH Biopolymers Over Petrochemical Polymers?. Journal of Polymers and the Environment, 2012, 20, 976-990.	2.4	15
69	Designing a Sustainability Assessment Framework for Selecting Sustainable Wastewater Treatment Technologies in Corporate Asset Decisions. Sustainability, 2021, 13, 3831.	1.6	15
70	The production of extracellular mucilaginous material (ECMM) in two wood-rotting basidiomycetes is affected by growth conditions. Mycologia, 2005, 97, 1163-1170.	0.8	13
71	An economic and environmental evaluation for bamboo-derived bioethanol. RSC Advances, 2014, 4, 29604-29611.	1.7	13
72	The use of the Decay Susceptibility Index (DSI) in the evaluation of biological durability tests of wood based board materials. European Journal of Wood and Wood Products, 2002, 60, 224-226.	1.3	11

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73	Key actions for a sustainable chemicals policy. Environment International, 2020, 137, 105463.	4.8	11
74	BioLPG for Clean Cooking in Sub-Saharan Africa: Present and Future Feasibility of Technologies, Feedstocks, Enabling Conditions and Financing. Energies, 2021, 14, 3916.	1.6	11
75	Bottled Biogasâ€"An Opportunity for Clean Cooking in Ghana and Uganda. Energies, 2021, 14, 3856.	1.6	10
76	Using Data from Earth Observation to Support Sustainable Development Indicators: An Analysis of the Literature and Challenges for the Future. Sustainability, 2022, 14, 1191.	1.6	10
77	A vapour phase preservative treatment of manufactured wood based board materials. Wood Science and Technology, 1989, 23, 273-279.	1.4	9
78	The production of extracellular mucilaginous material (ECMM) in two wood-rotting basidiomycetes is affected by growth conditions. Mycologia, 2005, 97, 1163-1170.	0.8	9
79	The inhibition of microbial growth by bamboo vinegar. Perspectives on Global Development and Technology, 2005, 4, 71-80.	0.2	9
80	End-of-life of starchâ€"polyvinyl alcohol biopolymers. Bioresource Technology, 2013, 127, 256-266.	4.8	9
81	A Prospective Social Life Cycle Assessment (sLCA) of Electricity Generation from Municipal Solid Waste in Nigeria. Sustainability, 2021, 13, 10177.	1.6	9
82	Can Current Earth Observation Technologies Provide Useful Information on Soil Organic Carbon Stocks for Environmental Land Management Policy?. Sustainability, 2021, 13, 12074.	1.6	9
83	Influence of Leaching Protocol Regimes on Losses of Wood Preservative Biocides. Bulletin of Environmental Contamination and Toxicology, 2002, 68, 118-125.	1.3	8
84	Monitoring losses of copper based wood preservatives in the Thames estuary. Environmental Pollution, 2006, 143, 367-375.	3.7	7
85	Poor Air Quality in Urban Settings: A Comparison of Perceptual Indicators, Causes and Management in Two Cities. Sustainability, 2022, 14, 1438.	1.6	7
86	Earth Observation for Monitoring, Reporting, and Verification within Environmental Land Management Policy. Sustainability, 2021, 13, 9105.	1.6	6
87	Speciation of Cr and As Leachates from CCA Treated Wood by Differential Pulse Polarography. Holzforschung, 2003, 57, 597-601.	0.9	5
88	Information from Earth Observation for the Management of Sustainable Land Use and Land Cover in Brazil: An Analysis of User Needs. Sustainability, 2020, 12, 489.	1.6	5
89	Spatial Analysis of Air Quality Assessment in Two Cities in Nigeria: A Comparison of Perceptions with Instrument-Based Methods. Sustainability, 2022, 14, 5403.	1.6	5
90	Investigating the Impact of COVID-19 Disruption on the Decarbonisation Agenda at Airports: Grounded or Ready for Take-Off?. Sustainability, 2021, 13, 12235.	1.6	4

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91	Life Cycle Assessment of the High Performance Discontinuous Fibre (HiPerDiF) Technology and Its Operation in Various Countries. Sustainability, 2022, 14, 1922.	1.6	4
92	Treatment of timber products with gaseous borate esters. Wood Science and Technology, 1995, 29, 385.	1.4	3
93	Analysis of the hyphal load during early stages of wood decay by basidiomycetes in the presence of the wood preservative fungicides CuSO4 and cyproconazole. Holzforschung, 2006, 60, 637-642.	0.9	3
94	Challenges in Using Earth Observation (EO) Data to Support Environmental Management in Brazil. Sustainability, 2020, 12, 10411.	1.6	3
95	Seeing the Wood for the Trees: Factors Limiting Woodland Management and Sustainable Local Wood Product Use in the South East of England. Sustainability, 2020, 12, 10071.	1.6	3
96	Assessing Education from Space: Using Satellite Earth Observation to Quantify Overcrowding in Primary Schools in Rural Areas of Nigeria. Sustainability, 2022, 14, 1408.	1.6	3
97	Considering evidence: The approach taken by the Hazardous Substances Advisory Committee in the UK. Environment International, 2016, 92-93, 565-568.	4.8	2
98	Assessing Urban Vulnerability to Flooding: A Framework to Measure Resilience Using Remote Sensing Approaches. Sustainability, 2022, 14, 2276.	1.6	2
99	Treatment of timber products with gaseous borate esters. Wood Science and Technology, 1998, 32, 25-31.	1.4	1
100	Comment on â€œSustainability Metrics: Life Cycle Assessment and Green Design in Polymersâ€• Environmental Science & Technology, 2011, 45, 5055-5056.	4.6	1
101	Breaking Down the Barriers: Exploring the Role of Collaboration in the Forestry Sector of South East England. Sustainability, 2021, 13, 10258.	1.6	1
102	An introduction to life cycle assessment (LCA) of painted timber components. Journal of Coatings Technology and Research, 1999, 82, 482-487.	0.2	0
103	Treatment of timber products with gaseous borate esters Part 2. Process improvement. Wood Science and Technology, 1998, 32, 25-31.	1.4	0