Andrew Hunt

List of Publications by Year
in descending order

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Version: 2024-02-01

124 papers	7,139 citations	61984 43 h-index	58581 82 g-index
147 all docs	147 docs citations	147 times ranked	8855 citing authors

#	Article	IF	Citations
1	Tools and techniques for solvent selection: green solvent selection guides. Sustainable Chemical Processes, 2016, 4, .	2.3	837
2	Dihydrolevoglucosenone (Cyrene) as a bio-based alternative for dipolar aprotic solvents. Chemical Communications, 2014, 50, 9650-9652.	4.1	329
3	Lignin valorization for the production of renewable chemicals: State-of-the-art review and future prospects. Bioresource Technology, 2018, 269, 465-475.	9.6	298
4	Generation, Capture, and Utilization of Industrial Carbon Dioxide. ChemSusChem, 2010, 3, 306-322.	6.8	291
5	Green chemistry and the biorefinery: a partnership for a sustainable future. Green Chemistry, 2006, 8, 853.	9.0	285
6	Lignin materials for adsorption: Current trend, perspectives and opportunities. Bioresource Technology, 2019, 272, 570-581.	9.6	236
7	Bio-derived materials as a green route for precious & critical metal recovery and re-use. Green Chemistry, 2015, 17, 1951-1965.	9.0	220
8	Ordered Mesoporous Organosilica with Ionicâ€Liquid Framework: An Efficient and Reusable Support for the Palladiumâ€Catalyzed Suzukiâ€“Miyaura Coupling Reaction in Water. Chemistry - A European Journal, 2010, 16, 8047-8053.	3.3	207
9	Opportunities for Bio-Based Solvents Created as Petrochemical and Fuel Products Transition towards Renewable Resources. International Journal of Molecular Sciences, 2015, 16, 17101-17159.	4.1	177
10	Cyclic Carbonates as Green Alternative Solvents for the Heck Reaction. ACS Sustainable Chemistry and Engineering, 2014, 2, 1739-1742.	6.7	168
11	Catalytic pyrolysis of plastic waste for the production of liquid fuels for engines. RSC Advances, 2019, 9, 5844-5857.	3.6	159
12	Aluminium-biochar composites as sustainable heterogeneous catalysts for glucose isomerisation in a biorefinery. Green Chemistry, 2019, 21, 1267-1281.	9.0	157
13	Valorisation of waste rice straw for the production of highly effective carbon based adsorbents for dyes removal. Journal of Cleaner Production, 2018, 172, 1128-1139.	9.3	154
14	The importance of being porous: polysaccharide-derived mesoporous materials for use in dye adsorption. RSC Advances, 2012, 2, 8992.	3.6	148
15	Pre-treatment and extraction techniques for recovery of added value compounds from wastes throughout the agri-food chain. Green Chemistry, 2016, 18, 6160-6204.	9.0	136
16	Use of green chemical technologies in an integrated biorefinery. Energy and Environmental Science, 2011, 4, 471-479.	30.8	130
17	Dihydrolevoglucosenone (Cyrene) As a Green Alternative to N,N-Dimethylformamide (DMF) in MOF Synthesis. ACS Sustainable Chemistry and Engineering, 2016, 4, 7186-7192.	6.7	123
18	Thermosetting resin based on epoxidised linseed oil and bio-derived crosslinker. Green Chemistry, 2012, 14, 1759.	9.0	107

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19	Applications of nanoparticles in biomass conversion to chemicals and fuels. Green Chemistry, 2014, 16, 573-584.	9.0	96
20	Palladium containing periodic mesoporous organosilica with imidazolium framework (Pd@PMO-IL): an efficient and recyclable catalyst for the aerobic oxidation of alcohols. Organic and Biomolecular Chemistry, 2011, 9, 7420.	2.8	85
21	Propylene carbonate and Î³-valerolactone as green solvents enhance Sn(<scp>iv</scp>)-catalysed hydroxymethylfurfural (HMF) production from bread waste. Green Chemistry, 2018, 20, 2064-2074.	9.0	85
22	Synthesis and Characterization of Alkylâ€Imidazoliumâ€Based Periodic Mesoporous Organosilicas: A Versatile Host for the Immobilization of Perruthenate (RuO₄^{â^'}) in the Aerobic Oxidation of Alcohols. Chemistry - A European Journal, 2012, 18, 13520-13530.	3.3	84
23	N-Butylpyrrolidinone as a dipolar aprotic solvent for organic synthesis. Green Chemistry, 2016, 18, 3990-3996.	9.0	81
24	Preparation of activated carbon from Dipterocarpus alatus fruit and its application for methylene blue adsorption. RSC Advances, 2020, 10, 21082-21091.	3.6	77
25	Polar aprotic solvent-water mixture as the medium for catalytic production of hydroxymethylfurfural (HMF) from bread waste. Bioresource Technology, 2017, 245, 456-462.	9.6	71
26	Chitosan Aerogels Exhibiting High Surface Area for Biomedical Application: Preparation, Characterization, and Antibacterial Study. International Journal of Polymeric Materials and Polymeric Biomaterials, 2011, 60, 988-999.	3.4	67
27	Self-assembled organicâ€“inorganic hybrid silica with ionic liquid framework: a novel support for the catalytic enantioselective Strecker reaction of imines using Yb(OTf)3â€“pybox catalyst. Chemical Communications, 2010, 46, 6947.	4.1	66
28	Low-temperature microwave-assisted pyrolysis of waste office paper and the application of bio-oil as an Al adhesive. Green Chemistry, 2015, 17, 260-270.	9.0	65
29	Supported Palladium Nanoparticles Synthesized by Living Plants as a Catalyst for Suzuki-Miyaura Reactions. PLoS ONE, 2014, 9, e87192.	2.5	63
30	Sugarcane waste as a valuable source of lipophilic molecules. Industrial Crops and Products, 2015, 76, 95-103.	5.2	59
31	Starch-derived carbonaceous mesoporous materials (StarbonÂ®) for the selective adsorption and recovery of critical metals. Green Chemistry, 2015, 17, 2146-2149.	9.0	57
32	Supercritical extraction of waxes and lipids from biomass: A valuable first step towards an integrated biorefinery. Journal of Cleaner Production, 2018, 177, 684-698.	9.3	57
33	Can bioâ€based chemicals meet demand? Global and regional caseâ€study around citrus wasteâ€derived limonene as a solvent for cleaning applications. Biofuels, Bioproducts and Biorefining, 2016, 10, 686-698.	3.7	56
34	The importance of elemental sustainability and critical element recovery. Green Chemistry, 2015, 17, 1949-1950.	9.0	55
35	Valorization of lignocellulosic fibres of paper waste into levulinic acid using solid and aqueous BrÃ¸nsted acid. Bioresource Technology, 2018, 247, 387-394.	9.6	55
36	Simultaneous manganese adsorption and biotransformation by Streptomyces violarus strain SBP1 cell-immobilized biochar. Science of the Total Environment, 2020, 713, 136708.	8.0	54

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37	Use of Starbon for the Adsorption and Desorption of Phenols. ACS Sustainable Chemistry and Engineering, 2013, 1, 1311-1318.	6.7	53
38	Economic Assessment of Supercritical CO2 Extraction of Waxes as Part of a Maize Stover Biorefinery. International Journal of Molecular Sciences, 2015, 16, 17546-17564.	4.1	52
39	2,2,5,5-Tetramethyltetrahydrofuran (TMTHF): a non-polar, non-peroxide forming ether replacement for hazardous hydrocarbon solvents. Green Chemistry, 2017, 19, 3671-3678.	9.0	52
40	Biocatalysis in bio-derived solvents: an improved approach for medium optimisation. Green Chemistry, 2014, 16, 2107-2110.	9.0	50
41	Utilisation of supercritical fluids for the effective extraction of waxes and Cannabidiol (CBD) from hemp wastes. Industrial Crops and Products, 2018, 112, 38-46.	5.2	48
42	Microwave assisted extraction as an important technology for valorising orange waste. New Journal of Chemistry, 2014, 38, 2278-2283.	2.8	45
43	Identification, quantification and Chrastil modelling of wheat straw wax extraction using supercritical carbon dioxide. Comptes Rendus Chimie, 2014, 17, 293-300.	0.5	45
44	Alkali silicates and structured mesoporous silicas from biomass power station wastes: the emergence of bio-MCMs. Green Chemistry, 2013, 15, 1203.	9.0	44
45	Supercritical CO₂ Extraction as an Effective Pretreatment Step for Wax Extraction in a Miscanthus Biorefinery. ACS Sustainable Chemistry and Engineering, 2016, 4, 5979-5988.	6.7	43
46	Towards sustainable kinetic resolution, a combination of bio-catalysis, flow chemistry and bio-based solvents. Green Chemistry, 2018, 20, 136-140.	9.0	43
47	Geminal Diol of Dihydrolevoglucosenone as a Switchable Hydrotrope: A Continuum of Green Nanostructured Solvents. ACS Sustainable Chemistry and Engineering, 2019, 7, 7878-7883.	6.7	43
48	Delicious not siliceous: expanded carbohydrates as renewable separation media for column chromatography. Chemical Communications, 2005, , 2903.	4.1	42
49	Challenges in the development of bio-based solvents: a case study on methyl(2,2-dimethyl-1,3-dioxolan-4-yl)methyl carbonate as an alternative aprotic solvent. Faraday Discussions, 2017, 202, 157-173.	3.2	39
50	Conservation of Critical Elements of the Periodic Table. ChemSusChem, 2019, 12, 397-403.	6.8	39
51	From waste to wealth using green chemistry. Pure and Applied Chemistry, 2013, 85, 1625-1631.	1.9	38
52	Intelligent Approach to Solvent Substitution: The Identification of a New Class of Levoglucosenone Derivatives. ChemSusChem, 2016, 9, 3503-3512.	6.8	38
53	Toward Financially Viable Phytoextraction and Production of Plant-Based Palladium Catalysts. Environmental Science & Technology, 2017, 51, 2992-3000.	10.0	38
54	Activated carbons from waste Cassia bakeriana seed pods as high-performance adsorbents for toxic anionic dye and ciprofloxacin antibiotic remediation. Bioresource Technology, 2021, 341, 125832.	9.6	38

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55	Acid-catalysed carboxymethylation, methylation and dehydration of alcohols and phenols with dimethyl carbonate under mild conditions. Green Chemistry, 2016, 18, 5839-5844.	9.0	37
56	Supercritical extraction as an effective first-step in a maize stover biorefinery. RSC Advances, 2015, 5, 43831-43838.	3.6	35
57	Impact of supercritical extraction on solid fuel wood pellet properties and off-gassing during storage. Green Chemistry, 2016, 18, 2682-2690.	9.0	35
58	Elemental Sustainability and the Importance of Scarce Element Recovery. RSC Green Chemistry, 2013, , 1-28.	0.1	33
59	Bio-based thermoset composites from epoxidised linseed oil and expanded starch. RSC Advances, 2014, 4, 23304-23313.	3.6	32
60	Direct synthesis of Pd nanoparticles on alginic acid and seaweed supports. Green Chemistry, 2015, 17, 2200-2207.	9.0	31
61	Optimisation and economic evaluation of the supercritical carbon dioxide extraction of waxes from waste date palm (Phoenix dactylifera) leaves. Journal of Cleaner Production, 2018, 186, 988-996.	9.3	31
62	Extraction of cones, branches, needles and bark from Norway spruce (Picea abies) by supercritical carbon dioxide and soxhlet extractions techniques. Industrial Crops and Products, 2020, 145, 112096.	5.2	31
63	Direct chitosan scaffold formation via chitin whiskers by a supercritical carbon dioxide method: a green approach. Journal of Materials Chemistry, 2009, 19, 8651.	6.7	28
64	The chemical value of wheat straw combustion residues. RSC Advances, 2011, 1, 523.	3.6	28
65	A natural template approach to mesoporous carbon spheres for use as green chromatographic stationary phases. RSC Advances, 2014, 4, 222-228.	3.6	27
66	Development of pharmaceutically relevant bio-based intermediates though aldol condensation and Claisenâ€“Schmidt reactions of dihydrolevoglucosenone (CyreneÂ®). Green Chemistry, 2018, 20, 4423-4427.	9.0	27
67	Rice straw-derived highly mesoporous carbon-zinc oxide nanocomposites as high performance photocatalytic adsorbents for toxic dyes. Journal of Cleaner Production, 2021, 318, 128583.	9.3	27
68	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.	9.0	26
69	Supercritical fluid extraction (SFE) as an effective tool in reducing auto-oxidation of dried pine sawdust for power generation. RSC Advances, 2012, 2, 1806.	3.6	24
70	Supercritical Carbon Dioxide Extraction of Value-Added Products and Thermochemical Synthesis of Platform Chemicals from Food Waste. ACS Sustainable Chemistry and Engineering, 2019, 7, 2821-2829.	6.7	23
71	Using in vivo nickel to direct the pyrolysis of hyperaccumulator plant biomass. Green Chemistry, 2019, 21, 1236-1240.	9.0	22
72	Improving water selectivity of poly (vinyl alcohol) (PVA) â€“ Fumed silica (FS) nanocomposite membranes by grafting of poly (2-hydroxyethyl methacrylate) (PHEMA) on fumed silica particles. Chemical Engineering Science, 2015, 122, 373-383.	3.8	21

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73	Polysaccharide-derived mesoporous materials (StarbonÂ®) for sustainable separation of complex mixtures. Faraday Discussions, 2017, 202, 451-464.	3.2	21
74	Shaped mesoporous materials from fresh macroalgae. Journal of Materials Chemistry A, 2013, 1, 5203.	10.3	19
75	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.	9.3	19
76	The effect of wood composition and supercritical CO2 extraction on charcoal production in ferroalloy industries. Energy, 2020, 193, 116696.	8.8	19
77	Removal of triclocarban from treated wastewater using cell-immobilized biochar as a sustainable water treatment technology. Journal of Cleaner Production, 2021, 320, 128919.	9.3	19
78	Phytoextraction as a tool for green chemistry. Green Processing and Synthesis, 2014, 3, .	3.4	17
79	Deposition of palladium nanoparticles in SBA-15 templated silica using supercritical carbon dioxide. Materials Letters, 2014, 116, 408-411.	2.6	17
80	Synthesis of cholesterol-reducing sterol esters by enzymatic catalysis in bio-based solvents or solvent-free. RSC Advances, 2016, 6, 48753-48756.	3.6	17
81	Vegetable oil as a highly effective 100% bio-based alternative solvent for the one-pot multicomponent Biginelli reaction. Green Chemistry, 2021, 23, 5766-5774.	9.0	17
82	Expanding the potential for waste polyvinyl-alcohol. Green Chemistry, 2009, 11, 1332.	9.0	16
83	Extractive profiles of different lodgepole pine (Pinus contorta) fractions grown under a direct seeding-based silvicultural regime. Industrial Crops and Products, 2014, 58, 220-229.	5.2	16
84	Supercritical extraction of biomass as an effective pretreatment step for the char yield control in pyrolysis. Renewable Energy, 2021, 170, 107-117.	8.9	16
85	Green preparation of tuneable carbonâ€“silica composite materials from wastes. Journal of Materials Chemistry A, 2015, 3, 14148-14156.	10.3	15
86	Direct comparison of safer or sustainable alternative dipolar aprotic solvents for use in carbonâ€“carbon bond formation. Reaction Chemistry and Engineering, 2020, 5, 1798-1804.	3.7	15
87	DFT and experimental analysis of aluminium chloride as a Lewis acid proton carrier catalyst for dimethyl carbonate carboxymethylation of alcohols. Catalysis Science and Technology, 2017, 7, 4859-4865.	4.1	13
88	Monolithic mesoporous graphitic composites as super capacitors: from Starbons to StarenesÂ®. Journal of Materials Chemistry A, 2018, 6, 1119-1127.	10.3	13
89	Effect of rate of pyrolysis on the textural properties of naturally-templated porous carbons from alginic acid. Journal of Analytical and Applied Pyrolysis, 2016, 121, 62-66.	5.5	12
90	Graphitic mesoporous carbon-silica composites from low-value sugarcane by-products for the removal of toxic dyes from wastewaters. Royal Society Open Science, 2020, 7, 200438.	2.4	12

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91	Impact of Conventional and Sustainable Solvents on the Yield, Selectivity, and Recovery of Curcuminoids from Turmeric. ACS Sustainable Chemistry and Engineering, 2022, 10, 104-114.	6.7	12
92	Composite proton conducting membranes from chitosan, poly(vinyl alcohol) and sulfonic acid-functionalized silica nanoparticles. International Journal of Hydrogen Energy, 2021, 46, 2479-2490.	7.1	11
93	High pressure systems as sustainable extraction and pre-treatment technologies for a holistic corn stover biorefinery. BMC Chemistry, 2021, 15, 37.	3.8	10
94	Green Chemistry for Postgraduates. Educacion Quimica, 2013, 24, 150-155.	0.1	9
95	Synthesis and application of tuneable carbonâ€“silica composites from the microwave pyrolysis of waste paper for selective recovery of gold from acidic solutions. RSC Advances, 2020, 10, 25228-25238.	3.6	9
96	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.	9.3	8
97	Deposition of Palladium Nanoparticles by the Coating of the Carbonaceous Layer from Wastepaper-Derived Bio-Oil. ACS Omega, 2020, 5, 16021-16029.	3.5	8
98	Rapid and efficient biphasic liquid extraction of metals with bio-derived lipophilic Î²-diketone. RSC Advances, 2016, 6, 95789-95792.	3.6	7
99	Development of hyperbranched crosslinkers from bio-derived platform molecules for the synthesis of epoxidised soybean oil based thermosets. RSC Advances, 2018, 8, 37267-37276.	3.6	7
100	Supercritical extraction and microwave activation of wood wastes for enhanced syngas production and generation of fullerene-like soot particles. Fuel Processing Technology, 2021, 212, 106633.	7.2	7
101	A Family of Waterâ€Immiscible, Dipolar Aprotic, Diamide Solvents from Succinic Acid. ChemSusChem, 2020, 13, 3212-3221.	6.8	6
102	Supercritical Extraction of Biomassâ€”A Green and Sustainable Method to Control the Pyrolysis Product Distribution. ACS Sustainable Chemistry and Engineering, 2021, 9, 5278-5287.	6.7	5
103	Characterization of dissolved organic carbon and disinfection by-products in biochar filter leachate using orbitrap mass spectrometry. Journal of Hazardous Materials, 2022, 424, 127691.	12.4	5
104	Enhanced triclocarban remediation from groundwater using Pseudomonas fluorescens strain MC46 immobilized on agro-industrial waste-derived biochar: Optimization and kinetic analysis. Journal of Environmental Chemical Engineering, 2022, 10, 107610.	6.7	4
105	Effect of harvest time on the compositional changes in essential oils, cannabinoids, and waxes of hemp (Cannabis sativa L.). Royal Society Open Science, 2022, 9, .	2.4	4
106	Bio-based materials: general discussion. Faraday Discussions, 2017, 202, 121-139.	3.2	3
107	Conformational and energetic properties of pyrrolidinyl PNA-DNA duplexes: A molecular dynamics simulation. Computational and Theoretical Chemistry, 2017, 1122, 27-33.	2.5	3
108	Application of bio-based solvents for biocatalysed synthesis of amides with Pseudomonas stutzeri lipase (PSL). Pure and Applied Chemistry, 2020, 92, 579-586.	1.9	3

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109	2,5-Diethyl-2,5-Dimethyloxolane (DEDMO) as a Nonpolar, Nonperoxide-Forming Ether Solvent for Organic Synthesis. ACS Sustainable Chemistry and Engineering, 2022, 10, 4486-4493.	6.7	3
110	Feedstocks and analysis: general discussion. Faraday Discussions, 2017, 202, 497-519.	3.2	2
111	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.	3.6	2
112	Chapter 3. Renewable Solvent Selection in Medicinal Chemistry. RSC Green Chemistry, 2016, , 28-40.	0.1	2
113	CHAPTER 1. Introduction to High-pressure Solvent Systems. RSC Green Chemistry, 2018, , 1-13.	0.1	2
114	CHAPTER 3. Supercritical Carbon Dioxide Extraction of Lipophilic Molecules. RSC Green Chemistry, 2018, , 40-76.	0.1	2
115	3-Methoxybutan-2-one as a sustainable bio-based alternative to chlorinated solvents. RSC Advances, 2021, 11, 39412-39419.	3.6	2
116	Chapter 5. The Importance of Elemental Sustainability and Critical Element Recovery for the Pharmaceutical Industry. RSC Green Chemistry, 2016, , 54-62.	0.1	1
117	CHAPTER 11. Solubility and Synthesis of Polymers Using Supercritical Carbon Dioxide. RSC Green Chemistry, 2018, , 340-373.	0.1	1
118	Color Removal of Wastewater from Silk Dyeing Process by Using Treated Fly Ash from Sugar Industry. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2021, 100, 212-218.	0.2	1
119	Preparation of Activated Carbons from Hydrolyzed <i>Dipterocarpus alatus</i> Leaves: Value Added Product from Biodiesel Production Waste. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2021, 100, 219-224.	0.2	1
120	Response to Comment on â€œImpact of Conventional and Sustainable Solvents on the Yield, Selectivity, and Recovery of Curcuminoids from Turmericâ€• ACS Sustainable Chemistry and Engineering, 2022, 10, 2273-2274.	6.7	1
121	Bio-based carbonaceous composite materials from epoxidised linseed oil, bio-derived curing agent and starch with controllable functionality. RSC Advances, 2017, 7, 24282-24290.	3.6	0
122	Bio-based chemicals: general discussion. Faraday Discussions, 2017, 202, 227-245.	3.2	0
123	Conversion technologies: general discussion. Faraday Discussions, 2017, 202, 371-389.	3.2	0
124	A simple strategy to enhance the sensitivity of fluorescent sensor-based CdS quantum dots by using a surfactant for Hg2+ detection. Analytical Methods, 2021, 13, 4069-4078.	2.7	0