Richard S Blackburn

List of Publications by Year
in descending order

82 papers	3,163 citations	159585 30 h-index	168389 53 g-index
84 all docs	84 docs citations	84 times ranked	4118 citing authors

#	Article	IF	Citations
1	Natural Polysaccharides and Their Interactions with Dye Molecules:Â Applications in Effluent Treatmentâ€. Environmental Science & Technology, 2004, 38, 4905-4909.	10.0	392
2	Carbon based conductive polymer composites. Journal of Materials Science, 2007, 42, 3408-3418.	3.7	319
3	Attenuated total reflectance Fourier-transform Infrared spectroscopy analysis of crystallinity changes in lyocell following continuous treatment with sodium hydroxide. Cellulose, 2010, 17, 103-115.	4.9	214
4	Comparative Analysis of Crystallinity Changes in Cellulose I Polymers Using ATR-FTIR, X-ray Diffraction, and Carbohydrate-Binding Module Probes. Biomacromolecules, 2011, 12, 4121-4126.	5.4	148
5	IR study on hydrogen bonding in epoxy resinâ€"silica nanocomposites. Progress in Natural Science: Materials International, 2008, 18, 801-805.	4.4	98
6	The development of indigo reduction methods and preâ€reduced indigo products. Coloration Technology, 2009, 125, 193-207.	1.5	92
7	Sorption of Poly(hexamethylenebiguanide) on Cellulose:â€‰ Mechanism of Binding and Molecular Recognition. Langmuir, 2006, 22, 5636-5644.	3.5	83
8	Green Chemistry Methods in Sulfur Dyeing:Â Application of Various Reducingd-Sugars and Analysis of the Importance of Optimum Redox Potential. Environmental Science & Technology, 2004, 38, 4034-4039.	10.0	76
9	A greener approach to cotton dyeings with excellent wash fastness. Green Chemistry, 2002, 4, 47-52.	9.0	71
10	Food colorants: their past, present and future. Coloration Technology, 2018, 134, 165-186.	1.5	71
11	Application of Anthocyanins from Blackcurrant (<i>Ribes nigrum</i> L.) Fruit Waste as Renewable Hair Dyes. Journal of Agricultural and Food Chemistry, 2018, 66, 6790-6798.	5.2	65
12	Sorption of Chlorhexidine on Cellulose:â€‰ Mechanism of Binding and Molecular Recognition. Journal of Physical Chemistry B, 2007, 111, 8775-8784.	2.6	63
13	Acute metabolic actions of the major polyphenols in chamomile: an in vitro mechanistic study on their potential to attenuate postprandial hyperglycaemia. Scientific Reports, 2018, 8, 5471.	3.3	61
14	Monoclonal Antibodies Directed to Fucoidan Preparations from Brown Algae. PLoS ONE, 2015, 10, e0118366.	2.5	56
15	In situ analysis of cell wall polymers associated with phloem fibre cells in stems of hemp, Cannabis sativa L.. Planta, 2008, 228, 1-13.	3.2	55
16	Treatment of cellulose with cationic, nucleophilic polymers to enable reactive dyeing at neutral pH without electrolyte addition. Journal of Applied Polymer Science, 2003, 89, 1026-1031.	2.6	52
17	Alkali treatment of cellulose II fibres and effect on dye sorption. Carbohydrate Polymers, 2011, 84, 299-307.	10.2	52
18	Effect of sodium hydroxide pre-treatment on the optical structural properties of lyocell. European Polymer Journal, 2009, 45, 455-465.	5.4	50

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19	Highly fluorinated chemicals in functional textiles can be replaced by re-evaluating liquid repellency and end-user requirements. Journal of Cleaner Production, 2019, 217, 134-143.	9.3	48
20	Optimizing the Colour and Fabric of Targets for the Control of the Tsetse Fly Glossina fuscipes fuscipes. PLoS Neglected Tropical Diseases, 2012, 6, e1661.	3.0	42
21	Improved garment longevity and reduced microfibre release are important sustainability benefits of laundering in colder and quicker washing machine cycles. Dyes and Pigments, 2020, 177, 108120.	3.7	41
22	Effect of silica concentration on electrical conductivity of epoxy resinâ€“carbon blackâ€“silica nanocomposites. Scripta Materialia, 2007, 56, 581-584.	5.2	40
23	Substitution of PFAS chemistry in outdoor apparel and the impact on repellency performance. Chemosphere, 2017, 181, 500-507.	8.2	39
24	Abrasion phenomena in twill tencel fabric. Journal of Applied Polymer Science, 2006, 102, 1391-1398.	2.6	37
25	Natural anthraquinonoid colorants as platform chemicals in the synthesis of sustainable disperse dyes for polyesters. Dyes and Pigments, 2011, 88, 7-17.	3.7	37
26	Selective enzymatic lipophilization of anthocyanin glucosides from blackcurrant (Ribes nigrum L.) skin extract and characterization of esterified anthocyanins. Food Chemistry, 2018, 266, 415-419.	8.2	37
27	Electrical conductivity of epoxy resinâ€“carbon blackâ€“silica nanocomposites: Effect of silica concentration and analysis of polymer curing reaction by FTIR. Scripta Materialia, 2007, 57, 949-952.	5.2	36
28	Dyeing behaviour of lyocell fabric: effect of fibrillation. Coloration Technology, 2007, 123, 387-393.	1.5	35
29	Sustainable Chemistry Method to Improve the Wash-off Process of Reactive Dyes on Cotton. ACS Sustainable Chemistry and Engineering, 2015, 3, 725-732.	6.7	34
30	Sustainable textiles. , 2009, , .		33
31	Natural dyes in madder (<i>Rubia</i> spp.) and their extraction and analysis in historical textiles. Coloration Technology, 2017, 133, 449-462.	1.5	32
32	Enhancing the Potential Exploitation of Food Waste: Extraction, Purification, and Characterization of Renewable Specialty Chemicals from Blackcurrants (<i>Ribes nigrum</i> L.). Journal of Agricultural and Food Chemistry, 2018, 66, 12265-12273.	5.2	31
33	Analysis of the physical properties of developing cotton fibres. European Polymer Journal, 2014, 51, 57-68.	5.4	30
34	Extraction of anthocyanins from <i>Aronia melanocarpa</i> skin waste as a sustainable source of natural colorants. Coloration Technology, 2019, 135, 5-16.	1.5	29
35	Effect of d-isomer concentration on the coloration properties of poly(lactic acid). Dyes and Pigments, 2006, 70, 251-258.	3.7	27
36	Effect of carbon black concentration on electrical conductivity of epoxy resinâ€“carbon blackâ€“silica nanocomposites. Journal of Materials Science, 2007, 42, 7861-7865.	3.7	27

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37	Dyeing behaviour of lyocell fabric: effect of NaOH pre-treatment. Cellulose, 2009, 16, 481-489.	4.9	27
38	Mild extraction methods using aqueous glucose solution for the analysis of natural dyes in textile artefacts dyed with Dyerâ€™s madder (Rubia tinctorum L.). Journal of Chromatography A, 2017, 1487, 36-46.	3.7	26
39	A greener approach to cotton dyeings. Part 2: application of 1â¶2 metal complex acid dyesPart 1 is ref. 1.. Green Chemistry, 2002, 4, 261-265.	9.0	24
40	Analysis of crystallinity changes in cellulose II polymers using carbohydrate-binding modules. Carbohydrate Polymers, 2012, 89, 213-221.	10.2	23
41	Understanding and improving textile recycling: a systems perspective. , 2009, , 179-199.		22
42	Study of the morphological characteristics and physical properties of Himalayan giant nettle (Girardinia diversifolia L.) fibre in comparison with European nettle (Urtica dioica L.) fibre. Materials Letters, 2016, 181, 200-203.	2.6	21
43	Kinetic Analysis of Cellulose Acetate/Cellulose II Hybrid Fiber Formation by Alkaline Hydrolysis. ACS Omega, 2019, 4, 4936-4942.	3.5	20
44	Life cycle analysis of cotton towels: impact of domestic laundering and recommendations for extending periods between washingThe opinions expressed in the following article are entirely those of the authors and do not necessarily represent the views of either the Royal Society of Chemistry, the Editor or the Editorial Board of Green Chemistry.. Green Chemistry, 2004, 6, G59.	9.0	19
45	Influence of laser irradiation on the optical and structural properties of poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 4	4.6	19
46	The Potential for Regenerated Protein Fibres within a Circular Economy: Lessons from the Past Can Inform Sustainable Innovation in the Textiles Industry. Sustainability, 2021, 13, 2328.	3.2	19
47	The Combined Synthesis and Coloration of Poly(lactic acid). Angewandte Chemie - International Edition, 2011, 50, 291-294.	13.8	18
48	Isolation and extraction of ruberythric acid from Rubia tinctorum L. and crystal structure elucidation. Phytochemistry, 2015, 117, 168-173.	2.9	18
49	Zinc oxide-induced changes to sunscreen ingredient efficacy and toxicity under UV irradiation. Photochemical and Photobiological Sciences, 2021, 20, 1273-1285.	2.9	18
50	Achieving sustainable textiles: a designerâ€™s perspective. , 2009, , 3-32.		16
51	Organic cotton: production practices and post-harvest considerations. , 2009, , 231-301.		15
52	Isolation and extraction of lucidin primeveroside from Rubia tinctorum L. and crystal structure elucidation. Phytochemistry, 2013, 95, 105-108.	2.9	15
53	Sustainable wool production and processing. , 2009, , 63-87.		14
54	Enzyme biotechnology for sustainable textiles. , 2009, , 113-138.		14

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55	Sorption of dyes on cellulose II: effect of alkali treatment of fibre and dye structure. Cellulose, 2011, 18, 1063-1072.	4.9	14
56	Enrichment of cellulose acetate nanofibre assemblies for therapeutic delivery of l-tryptophan. International Journal of Biological Macromolecules, 2018, 108, 1-8.	7.5	14
57	From Clothing Rations to Fast Fashion: Utilising Regenerated Protein Fibres to Alleviate Pressures on Mass Production. Energies, 2021, 14, 5654.	3.1	14
58	Eco-labeling for textiles and apparel. , 2009, , 214-230.		13
59	Alkali treatments of lyocell in continuous processes. I. Effects of temperature and alkali concentration on the treatments of plain woven fabrics. Journal of Applied Polymer Science, 2009, 113, 3646-3655.	2.6	12
60	Degradation of lucidin: New insights into the fate of this natural pigment present in Dyer's madder () Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.7	12
61	Tensile and elastic behavior of tencel continuous filaments. Journal of Applied Polymer Science, 2006, 99, 1496-1503.	2.6	9
62	Systems change for sustainability in textiles. , 2009, , 369-380.		9
63	Comparative sorption isotherms for colorants present in Dyersâ€™ madder (<i>Rubia tinctorum</i> L.) provide new insights into historical dyeing. Coloration Technology, 2018, 134, 3-12.	1.5	9
64	Carbon Black Reinforced Epoxy Resin Nanocomposites as Bending Sensors. Journal of Composite Materials, 2009, 43, 367-376.	2.4	7
65	A custom ink-jet printing system using a novel pretreatment method. Coloration Technology, 2009, 125, 357-365.	1.5	7
66	The dyeing of nonwoven fabrics part 1: Initial studies. Dyes and Pigments, 2012, 94, 592-598.	3.7	6
67	Environmentally friendly plasma technologies for textiles. , 2009, , 155-178.		5
68	<i>In situ</i> fabric coloration with indigo synthesised in flow. Coloration Technology, 2019, 135, 127-132.	1.5	5
69	Key sustainability issues in textile dyeing * *Note: Dianix, Imperon, Levafix, Realan, Remazol, Controlled Coloration, econfidence and Optidye are registered trademarks of DyStar Textilfarben GmbH & Co. Deutschland KG, Germany.. , 2009, , 139-154.		4
70	Mechanism of crosslinking Tencel woven fabric for superior easy-care properties and analysis using fluorescence microscopy. Journal of Applied Polymer Science, 2006, 101, 2154-2161.	2.6	3
71	Sustainable synthetic fibres: the case of poly(hydroxyalkanoates) (PHA) and other fibres. , 2009, , 88-112.		3
72	John Mercer FRS , FCS , MP hS, JP : the Father of Textile Chemistry. Coloration Technology, 2019, 135, 171-182.	1.5	3

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73	Poly(lactic acid) fibers (PLA). , 2008, , 140-170.		2
74	The role of nanotechnology in sustainable textiles. , 2009, , 302-328.		2
75	Environmentally friendly flame-retardant textiles. , 2009, , 339-368.		2
76	Backside Cover: The Combined Synthesis and Coloration of Poly(lactic acid) (Angew. Chem. Int. Ed.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	13.8	2
77	Effect of solid particle loading on nucleophilic addition of epoxy-resin to isophorone diisocyanate. Particuology, 2008, 6, 24-29.	3.6	1
78	Consumer perceptions of recycled textile fibers. , 2009, , 203-213.		1
79	Quantifying Water Repellency by Modifying Spray Test Method AATCC TM22 to Extend Test Duration Allowing Discrimination between Similarly Graded Fabrics. AATCC Journal of Research, 2020, 7, 8-14.	0.6	1
80	The use of recovered plastic bags in nonwoven fabrics. , 2009, , 329-338.		0
81	2018 BioColours conference. Coloration Technology, 2019, 135, 3-4.	1.5	0
82	Referencing Historical Practices and Emergent Technologies in the Future Development of Sustainable Textiles: A Case Study Exploring â€œArdilâ€, a UK-Based Regenerated Protein Fibre. Sustainability, 2022, 14, 8414.	3.2	0