Mark R St J Foreman

List of Publications by Year in descending order

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123 papers 4,754 citations

40 h-index

76294

65 g-index

124 all docs

124 docs citations

124 times ranked 2828 citing authors

#	Article	IF	Citations
1	6,6′â€Bis(5,5,8,8â€ŧetramethylâ€5,6,7,8â€ŧetrahydroâ€benzo[1,2,4]triazinâ€3â€yl) [2,2′]bipyridine, an Agent for the Separation of Americium(III) and Curium(III) from the Lanthanides. Solvent Extraction and Ion Exchange, 2006, 24, 463-483.	Effective E 0.8	xtracting 243
2	Complexes formed between the quadridentate, heterocyclic molecules $6,6\hat{a}\in^2$ -bis-(5,6-dialkyl-1,2,4-triazin-3-yl)-2,2 $\hat{a}\in^2$ -bipyridine (BTBP) and lanthanides(iii): implications for the partitioning of actinides(iii) and lanthanides(iii). Dalton Transactions, 2006, , 1645-1653.	1.6	195
3	An overview and historical look back at the solvent extraction using nitrogen donor ligands to extract and separate An(III) from Ln(III). Radiochimica Acta, 2008, 96, 225-233.	0.5	178
4	New bis(triazinyl) pyridines for selective extraction of americium(iii). New Journal of Chemistry, 2006, 30, 1171.	1.4	162
5	Synthesis and characterisation of infinite co-ordination networks from flexible dipyridyl ligands and cadmium salts â€. Dalton Transactions RSC, 2000, , 3065-3073.	2.3	156
6	Demonstration of a SANEX Process in Centrifugal Contactors using the CyMe ₄ â€BTBP Molecule on a Genuine Fuel Solution. Solvent Extraction and Ion Exchange, 2009, 27, 97-106.	0.8	152
7	6,6′-bis-(5,6-diethyl-[1,2,4]triazin-3-yl)-2,2′-bipyridyl the first example of a new class of quadridentate heterocyclic extraction reagents for the separation of americium(III) and europium(III). Inorganic Chemistry Communication, 2005, 8, 239-241.	1.8	131
8	Polyazolyl Chelate Chemistry. 12.1An Unusual Mode of Coordination for the Hydrotris(methimazolyl)borato Ligand. Organometallics, 2003, 22, 4446-4450.	1.1	113
9	Crystallisation of H3BTC, H3TPO or H2SDA with MII (Mâ€=â€Co, Mn or Zn) and 2,2′-bipyridyl: design an control of co-ordination architecture, and magnetic properties (H3BTCâ€=â€benzene-1,3,5-tricarboxylic) Tj of the Chemical Society Dalton Transactions. 1999 4209-4216.	d ETQq1 1 ().784314 rgB
10	Polyazolyl Chelate Chemistry. 13. An Osmaboratranel. Organometallics, 2004, 23, 913-916.	1.1	108
11	The first rhodaboratrane: [RhCl(PPh3){B(mt)3}](Rhâ†'B) (mt = methimazolyl). Chemical Communications, 2005, , 221-223.	2.2	107
12	Separation of rare earths and other valuable metals from deep-eutectic solvents: a new alternative for the recycling of used NdFeB magnets. RSC Advances, 2017, 7, 32100-32113.	1.7	107
13	A TBP/BTBP-based GANEX Separation Process. Part 1: Feasibility. Solvent Extraction and Ion Exchange, 2010, 28, 437-458.	0.8	103
14	Chemical Transformations in Li-Ion Battery Electrode Materials by Carbothermic Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 13668-13679.	3.2	93
15	An Investigation into the Extraction of Americium(III), Lanthanides and Dâ€Block Metals by 6,6′â€Bisâ€(5,6â€dipentylâ€{1,2,4]triazinâ€3â€yl)â€{2,2′]bipyridinyl (C5â€BTBP). Solvent Extraction an 23, 645-662.	d IonoExch	ang e ,02005,
16	Hydrothermal synthesis and characterisation of lead(II) benzene-1,3,5-tricarboxylate [Pb3BTC2]·H2O: a lead(II) carboxylate polymer. Inorganic Chemistry Communication, 2000, 3, 234-238.	1.8	87
17	An analysis of the composition and metal contamination of plastics from waste electrical and electronic equipment (WEEE). Waste Management, 2013, 33, 915-922.	3.7	86
18	Separation of Actinides(III) from Lanthanides(III) in Simulated Nuclear Waste Streams using 6,6′â€Bisâ€(5,6â€dipentylâ€[1,2,4]triazinâ€3â€yl)â€[2,2′]bipyridinyl (C5â€BTBP) in Cyclohexanone. Sol Ion Exchange, 2006, 24, 823-843.	ventc E8 trac	ctio s 4nd

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19	Extraction Properties of $6,6\hat{a}\in^2\hat{a}\in B$ is $\hat{a}\in(5,6\hat{a}\in d$ ipenty $ \hat{a}\in[1,2,4]$ triaz in $\hat{a}\in(3\hat{a}\in y \hat{a})$ bipyridiny (C5 $\hat{a}\in B$ TBP). Extraction and Ion Exchange, 2006, 24, 299-318.	Solvent	83
20	Synthesis and characterisation of infinite di- and tri-nuclear zinc co-ordination networks with flexible dipyridyl ligands. Dalton Transactions RSC, 2000, , 1995-2000.	2.3	80
21	Hydrothermal synthesis of polymeric metal carboxylates from benzene-1,2,4,5-tetracarboxylic acid and benzene-1,2,4-tricarboxylic acid. Inorganica Chimica Acta, 2001, 315, 126-132.	1.2	80
22	Synthesis of the Ruthenaboratranes [Ru(CS)(PPh ₃){B(mt) ₃ }] <i>(Ru→B)⁸</i> and [Ru(CO)(CNR){B(mt) ₃ }] <i>(Ru→B)⁸</i> (mt = methimazolyl, R =) Tj ETQq0 0 0 rgBT /	Overlock 1	10 7T f 50 617
23	Hydrotris(methimazolyl)borato Alkylidyne Complexes of Tungsten1. Organometallics, 2003, 22, 3831-3840.	1.1	75
24	Incineration of EV Lithium-ion batteries as a pretreatment for recycling – Determination of the potential formation of hazardous by-products and effects on metal compounds. Journal of Hazardous Materials, 2020, 393, 122372.	6.5	70
25	A TBP/BTBP-based GANEX Separation Processâ€"Part 2: Ageing, Hydrolytic, and Radiolytic Stability. Solvent Extraction and Ion Exchange, 2011, 29, 157-175.	0.8	65
26	Synthesis and characterisation of polymeric metal-ion carboxylates from benzene-1,3,5-tricarboxylic acid with $Mn(II)$, $Co(II)$ or $Zn(II)$ and 2,2-bipyridyl, phenanthroline or a pyridyl-2-(1-methyl-1H-pyrazol-3-yl) derivative. Inorganica Chimica Acta, 2001, 319, 159-175.	1.2	61
27	Synthesis and characterisation of polymeric and oligomeric lead(II) carboxylates. Dalton Transactions RSC, 2001, , 1897-1903.	2.3	56
28	The coordination chemistry of 1,2,4-triazinyl bipyridines with lanthanide(iii) elements $\hat{a}\in$ " implications for the partitioning of americium(iii). Dalton Transactions, 2003, , 1675-1685.	1.6	56
29	Recycling of high purity selenium from CIGS solar cell waste materials. Waste Management, 2014, 34, 1775-1782.	3.7	54
30	2,4-Diferrocenyl-1,3-dithiadiphosphetane 2,4-disulfide; structure and reactions with catechols and $[PtCl2(PR3)2](R = Et \text{ or Bun})$. Journal of the Chemical Society Dalton Transactions, 1996, , 3653.	1.1	53
31	A TRLFS study on the complexation of Cm(iii) and Eu(iii) with 4-t-butyl-6,6 \hat{a} \$\in\$2-bis-(5,6-diethyl-1,2,4-triazin-3-yl)-2,2 \hat{a} \$\in\$2-bipyridine in a water/2-propanol mixture. Dalton Transactions, 2010, 39, 923-929.	1.6	53
32	One-dimensional structures of manganese(II), copper(II) and cobalt(II) coordination complexes [MnII(hfac)2L] (hfac=hexafluoroacetylacetonate anion; L=4,4-bipyridyl), [CuII(hfac)2L] (L=1,3-dipyridylpropane or 4,4-bipyridyl-N,N′-dioxide) and [CoII(hfac)2L] (L=4,4-bipyridyl-N,N′-dioxide). Inorganica Chimica Acta, 2000, 303, 132-136.	1.2	47
33	Synthesis, structure, and redox states of homoleptic d-block metal complexes with bis-1,2,4-triazin-3-yl-pyridine and 1,2,4-triazin-3-yl-bipyridine extractants. Polyhedron, 2006, 25, 888-900.	1.0	47
34	Hydrothermal crystallisation of metal (II) orotates (M=nickel, cobalt, manganese or zinc). Effect of 2,2-bipyridyl, 2,2-dipyridyl amine, 1-methyl-3-(2-pyridyl)pyrazole, phenanthroline and 2,9-dimethyl-1,10-phenanthroline upon structure. Inorganica Chimica Acta, 2002, 332, 135-145.	1.2	46
35	Studies on the Solvent Extraction of Rare Earth Metals from Fluorescent Lamp Waste Using Cyanex 923. Solvent Extraction and Ion Exchange, 2014, 32, 650-668.	0.8	46
36	Synthesis of co-ordination networks from flexible bis-(4-pyridyl) ligands and cadmium salts Crystal Engineering, 2001, 4, 293-308.	0.7	45

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37	Metallathiirenes. 5.1Bis- and Tris(methimazolyl)borato Thiocarbamoyl Complexes of Molybdenum(II). Organometallics, 2003, 22, 5593-5596.	1.1	44
38	A comparison of two methods of recovering cobalt from a deep eutectic solvent: Implications for battery recycling. Journal of Cleaner Production, 2017, 167, 806-814.	4.6	44
39	Organo-P–S and P–Se heterocycles. Dalton Transactions RSC, 2000, , 1533-1543.	2.3	41
40	Characterization and Leaching of Neodymium Magnet Waste and Solvent Extraction of the Rare-Earth Elements Using TODGA. Journal of Sustainable Metallurgy, 2017, 3, 638-645.	1.1	41
41	Synthesis and characterisation of polymeric manganese and zinc 5-hydroxyisophthalates. Polyhedron, 2001, 20, 2293-2303.	1.0	40
42	One-dimensional structures of nickel(II) and cobalt(II) coordination complexes {[ML2(H2O)2]·L·H2O·(ClO4)2} (M=Co or Ni; L=1,3-bis(4-pyridyl)propane). Inorganica Chimica Acta, 2001, 318, 171-174.	1.2	37
43	Structural studies of lanthanide complexes with tetradentate nitrogen ligands. Inorganica Chimica Acta, 2004, 357, 4102-4112.	1.2	37
44	The behaviour of organic solvents containing C5-BTBP and CyMe4-BTBP at low irradiation doses. Radiochimica Acta, 2007, 95, 637-642.	0.5	37
45	The structures of CyMe ₄ -BTBP complexes of americium(<scp>iii</scp>) and europium(<scp>iii</scp>) in solvents used in solvent extraction, explaining their separation properties. Dalton Transactions, 2015, 44, 18395-18402.	1.6	37
46	Synthesis and characterisation of infinite coordination networks with 1,6-bis(4-pyridyl)hexane and copper nitrate. Crystal Engineering, 2001, 4, 319-328.	0.7	35
47	New mixed-donor unsymmetrical P–N–P ligands and their palladium(II) complexes. New Journal of Chemistry, 2001, 25, 1256-1263.	1.4	34
48	Structures of Mn(II) thiocyanate co-ordination polymers from flexible bipyridyl ligands. Inorganica Chimica Acta, 2001, 318, 175-180.	1.2	33
49	Studies of a Solvent for GANEX Applications Containing CyMe ₄ -BTBP and DEHBA in Cyclohexanone. Separation Science and Technology, 2012, 47, 663-669.	1.3	33
50	Studies on the Parallel Synthesis and Evaluation of New Heterocyclic Extractants for the Partitioning of Minor Actinides. Solvent Extraction and Ion Exchange, 2003, 21, 637-652.	0.8	32
51	Inhibiting radiolysis of BTP molecules by addition of nitrobenzene. Radiochimica Acta, 2006, 94, .	0.5	32
52	Thermodynamics of Dissolution for Bis(triazine)â^Bipyridine-Class Ligands in Different Diluents and Its Reflection on Extraction. Journal of Chemical & Engineering Data, 2010, 55, 5133-5137.	1.0	32
53	Progress towards a process for the recycling of nickel metal hydride electric cells using a deep eutectic solvent. Cogent Chemistry, 2016, 2, 1139289.	2.5	30
54	Influence of dose rate on the radiolytic stability of a BTBP solvent for actinide(III)/lanthanide(III) separation. Radiochimica Acta, 2009, 97, .	0.5	29

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55	The solvent extraction of rare earth elements from nitrate media with novel polyamides containing malonamide groups. Hydrometallurgy, 2016, 164, 24-30.	1.8	26
56	Novel 1,2-thiaphosphetanes from diferrocenyldithiadiphosphetane disulfide. Chemical Communications, 1997, , 855-856.	2.2	24
57	First 5f-element complexes with the tetradentate BTBP ligand. Synthesis and crystal structure of uranyl(VI) compounds with CyMe4BTBP. Radiochimica Acta, 2008, 96, .	0.5	23
58	Fission product interactions with nitrogen donor ligands used for spent nuclear fuel treatment. Polyhedron, 2013, 50, 154-163.	1.0	23
59	Formation of organic iodides from containment paint ingredients caused by gamma irradiation. Journal of Nuclear Science and Technology, 2013, 50, 689-694.	0.7	23
60	Metal extraction from a deep eutectic solvent, an insight into activities. Physical Chemistry Chemical Physics, 2020, 22, 11012-11024.	1.3	23
61	Novel Heterobimetallic Coordination of the H2B(mt)2Ligand: The Complex [Mo(SnMe2Cl)(CO)3{ι⁄4-S:ΰ3-H,S,Sâ€~-H2B(mt)2}] (mt = methimazolyl). Organometallics, 2005, 24, 5224-5226.	1.1	22
62	Hydrothermal Synthesis and Characterisation of M(pdc)·3H2O (pdc=2,5-pyridinedicarboxylate); M=Co, Ni, CoxNiy (x=0.4–0.6, y=0.6–0.4). Journal of Chemical Research Synopses, 1998, , 754-755.	0.3	21
63	Extraction Behavior of Nickel(II) using some of the BTBPâ€Class Ligands. Solvent Extraction and Ion Exchange, 2007, 25, 603-617.	0.8	20
64	Poly(methimazolyl)borato Nitrosyl Complexes of Molybdenum and Tungsten. Organometallics, 2008, 27, 4455-4463.	1.1	20
65	Affinity of charcoals for different forms of radioactive organic iodine. Nuclear Engineering and Design, 2018, 328, 228-240.	0.8	20
66	The preparation of a solubilized form of Lawessons reagent and its thionation reactions. Heteroatom Chemistry, 1999, 10, 651-657.	0.4	19
67	A TBP/BTBP-Based GANEX Separation Process – Part 3: Fission Product Handling. Solvent Extraction and Ion Exchange, 2013, 31, 237-252.	0.8	19
68	Investigations regarding the wet decontamination of fluorescent lamp waste using iodine in potassium iodide solutions. Waste Management, 2015, 36, 289-296.	3.7	18
69	Dielectric strength of \hat{I}^3 -radiation cross-linked, high vinyl-content polyethylene. European Polymer Journal, 2015, 64, 101-107.	2.6	18
70	Stability of phenyl trifluoromethyl sulfone as diluent in a grouped actinide extraction process. Journal of Radioanalytical and Nuclear Chemistry, 2015, 304, 287-291.	0.7	18
71	Coordination Networks with 1,3-Bis(4-pyridyl)propane. A Flexible Ligand Exhibiting Supramolecular Isomerism. Journal of Chemical Research Synopses, 1999, , 74-75.	0.3	16
72	The synthesis and characterization of N-(diphenylthiophosphinyl)-P-phenyl-thiophosphonamidic acid phenyl ester and related compounds chiral at phosphorus. Inorganic Chemistry Communication, 2001, 4, 36-40.	1.8	16

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73	Aqueous complexation of palladium to prevent precipitation and extraction in a group actinide extraction system. Hydrometallurgy, 2012, 115-116, 71-76.	1.8	16
74	Antimony leaching in plastics from waste electrical and electronic equipment (WEEE) with various acids and gamma irradiation. Waste Management, 2013, 33, 1478-1482.	3.7	16
75	Synthesis of I-131 labelled iodine species relevant during severe nuclear accidents in light water reactors. Radiochimica Acta, 2013, 101, 675-680.	0.5	16
76	Extraction thermodynamics of Am(III) and Eu(III) using CyMe4-BTBP in various organic diluents. Journal of Chemical Thermodynamics, 2014, 76, 64-69.	1.0	16
77	An introduction to serious nuclear accident chemistry. Cogent Chemistry, 2015, 1, 1049111.	2.5	16
78	The Influence of Compatibilizer Addition and Gamma Irradiation on Mechanical and Rheological Properties of a Recycled WEEE Plastics Blend. Recycling, 2016, 1, 101-110.	2.3	16
79	Activity coefficients in deep eutectic solvents: implications for the solvent extraction of metals. New Journal of Chemistry, 2018, 42, 2006-2012.	1.4	15
80	Phosphorus–sulfur–nitrogen heterocycles from diferrocenyl dithiadiphosphetane disulfide. Chemical Communications, 1997, , 1269-1270.	2.2	12
81	Targeting fluorescent lamp waste for the recovery of cerium, lanthanum, europium, gadolinium, terbium and yttrium. Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy, 2016, 125, 199-203.	0.6	12
82	Development of a Novel GANEX Process. ACS Symposium Series, 2010, , 119-130.	0.5	11
83	Synthesis and Screening of <i>t</i> -Bu-CyMe ₄ -BTBP, and Comparison with CyMe ₄ -BTBP. Solvent Extraction and Ion Exchange, 2014, 32, 720-736.	0.8	11
84	Dihydrobis (methimazolyl) borato complexes of ruthenium and osmium. Dalton Transactions, 2017, 46, 14957-14972.	1.6	11
85	The Influence of Extrusion Conditions on Mechanical and Thermal Properties of Virgin and Recycled PP, HIPS, ABS and Their Ternary Blends. International Polymer Processing, 2013, 28, 541-549.	0.3	10
86	N-[2-(maleimido)ethyl]-3-(trimethylstannyl)benzamide, a molecule for radiohalogenation of proteins and peptides. Applied Radiation and Isotopes, 2015, 96, 1-5.	0.7	10
87	Synthesis and ligand substitution reactions of least properties o	1.6	9
88	Preparation and X-ray structure of a new organo-P–O–S heterocycle. Journal of the Chemical Society Chemical Communications, 1995, , 2217-2218.	2.0	8
89	Radon capture with silver exchanged zeolites. Radiochimica Acta, 2012, 100, 395-399.	0.5	8
90	Identification of the chemical inventory of different paint types applied in nuclear facilities. Journal of Radioanalytical and Nuclear Chemistry, 2013, 295, 1981-1999.	0.7	8

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91	Comparison of the Extraction as a Function of Time in Two GANEX Solvents: Influence of Metal Loading, Interfacial Tension, and Density. Solvent Extraction and Ion Exchange, 2013, 31, 604-616.	0.8	8
92	A Comparison of Americium Extractions as a Function of Time using Two Bis-Triazine-Bipyridine Ligands in Long-Chained Alcohol Diluents. Separation Science and Technology, 2014, 49, 2060-2065.	1.3	8
93	Relative hemilabilities of H2B(az)2 (az = pyrazolyl, dimethylpyrazolyl, methimazolyl) chelates in the complexes $[M(\hat{l}-C3H5)(CO)2\{H2B(az)2\}]$ (M = Mo, W). Dalton Transactions, 2020, 49, 781-796.	1.6	8
94	Title is missing!. Journal of Chemical Crystallography, 1998, 28, 653-656.	0.5	7
95			

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109	A new polymorph, formC, of [1,2-bis(diphenylphosphino)ethane]dichloronickel(II). Acta Crystallographica Section C: Crystal Structure Communications, 2001, 57, 690-693.	0.4	3
110	Poly[[diaquacadmium(II)]- $\hat{1}$ /43-(1-carboxybenzene-3,5-dicarboxylato)]. Acta Crystallographica Section E: Structure Reports Online, 2001, 57, m85-m87.	0.2	3
111	Reactor accident chemistry an update. Cogent Chemistry, 2018, 4, 1450944.	2.5	3
112	One-dimensional and two-dimensional coordination polymers constructed from Cd ²⁺ ions and flexible bipyridyl bridging ligands. Journal of Coordination Chemistry, 2015, 68, 1719-1732.	0.8	2
113	Organic Telluride Formation from Paint Solvents Under Gamma Irradiation. Nuclear Technology, 2022, 208, 1734-1744.	0.7	2
114	Solvent extraction of Am(III) and Eu(III) from nitrate solution using synergistic mixtures of N-tridentate heterocycles and chlorinated cobalt dicarbollide. European Physical Journal D, 2006, 56, D459-D467.	0.4	1
115	Hydrogenation catalysts from used nickel metal hydride batteries. Green Chemistry, 2008, 10, 825.	4.6	1
116	Coordination networks of Cu2+ ions with 1,3-bis[2-(4-pyridyl)ethyl]benzene: Strong structure-directing role of the counter ion (nitrate, acetate and sulphate), leading to clusters, sheets and chains. Polyhedron, 2015, 102, 496-502.	1.0	1
117	catena-Poly[[(2,2′-bipyridine-N,N′)cobalt(II)]-ι¼-4,4′-oxydibenzoato-O,O′:O′′,O′′′]. Act E: Structure Reports Online, 2001, 57, m169-m171.	a Grystallo	ographica Se
118	Synthesis of MXOY and Related Rings. Phosphorus, Sulfur and Silicon and the Related Elements, 2001, 169, 297-300.	0.8	0
119	Polymeric diaqua(μ2-2,2′-bipyrimidinyl-ΰ4N1,N1′:N3,N3′)-di-μ3-hydroxy-bis(μ5-benzene-1,3,5-tricarboxylato-κ! dihydrate. Acta Crystallographica Section C: Crystal Structure Communications, 2002, 58, m487-m489.	501.402:0	3: 0 3:05)t <mark>et</mark>
120	Crystal structure of a layered coordination polymer based on a 44net containing Cd2+ions and 1,5-bis(pyridin-4-yl)pentane linkers. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, 80-83.	0.2	0
121	Crystal structures of two one-dimensional coordination polymers constructed from Mn2+ ions, chelating hexafluoro-acetylacetonate anions, and flexible bipyridyl bridging ligands. Journal of Structural Chemistry, 2016, 57, 1169-1175.	0.3	O
122	An Organic Experiment on SN2 Chemistry which uses a Radioisotope that is used in Nuclear Medicine and is Relevant to Nuclear Accidents. Journal of Nuclear Energy Science and Power Generation Technology (discontinued), 2014, 03, .	0.1	0
123	Coordination Networks with 1,3-Bis(4-pyridyl)propane. A Flexible Ligand Exhibiting Supramolecular Isomerism. Journal of Chemical Research, 1999, 23, 74-75.	0.6	0