David Mills

List of Publications by Year
in descending order

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96 papers	6,182 citations	81743 39 h-index	71532 76 g-index
112 all docs	112 docs citations	112 times ranked	3531 citing authors

#	Article	IF	Citations
1	Small Molecule Activation by Lanthanide Complexes. , 2022, , 441-469.		1
2	Metallocene Anions: From Electrochemical Curiosities to Isolable Complexes. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	5
3	Synthesis of heteroleptic yttrium and dysprosium 1,2,4-tris(trimethylsilyl)cyclopentadienyl complexes. Australian Journal of Chemistry, 2022, 75, 684-697.	0.5	2
4	Isolation and electronic structures of derivatized manganocene, ferrocene and cobaltocene anions. Nature Chemistry, 2021, 13, 243-248.	6.6	39
5	Slow magnetic relaxation in distorted tetrahedral Dy(<scp>iii</scp>) aryloxide complexes. Chemical Communications, 2021, 57, 9208-9211.	2.2	17
6	fâ€Block Phospholyl and Arsolyl Chemistry. Chemistry - A European Journal, 2021, 27, 6645-6665.	1.7	14
7	Mononuclear Dysprosium Alkoxide and Aryloxide Singleâ€Molecule Magnets. Chemistry - A European Journal, 2021, 27, 7625-7645.	1.7	72
8	Frontispiece: fâ€Block Phospholyl and Arsolyl Chemistry. Chemistry - A European Journal, 2021, 27, .	1.7	0
9	Frontispiece: Mononuclear Dysprosium Alkoxide and Aryloxide Singleâ€Molecule Magnets. Chemistry - A European Journal, 2021, 27, .	1.7	1
10	²⁹Si NMR Spectroscopy as a Probe of s- and f-Block Metal(II)â€“Silanide Bond Covalency. Journal of the American Chemical Society, 2021, 143, 9813-9824.	6.6	11
11	A Cost-Effective Semi-Ab Initio Approach to Model Relaxation in Rare-Earth Single-Molecule Magnets. Journal of Physical Chemistry Letters, 2021, 12, 8826-8832.	2.1	35
12	Functionalized Tris(anilido)triazacyclononanes as Hexadentate Ligands for the Encapsulation of U(III), U(IV) and La(III) Cations. Inorganics, 2021, 9, 86.	1.2	3
13	f-Element silicon and heavy tetrel chemistry. Chemical Science, 2020, 11, 10871-10886.	3.7	21
14	Polarised covalent thorium(<scp>iv</scp>)â€“ and uranium(<scp>iv</scp>)â€“silicon bonds. Chemical Communications, 2020, 56, 12620-12623.	2.2	11
15	Understanding magnetic relaxation in single-ion magnets with high blocking temperature. Physical Review B, 2020, 101, .	1.1	94
16	Heteroleptic Samarium(III) Chalcogenide Complexes: Opportunities for Giant Exchange Coupling in Bridging If- and Ï€-Radical Lanthanide Dichalcogenides. Inorganic Chemistry, 2020, 59, 7571-7583.	1.9	14
17	Probing Relaxation Dynamics in Fiveâ€Coordinate Dysprosium Singleâ€Molecule Magnets. Chemistry - A European Journal, 2020, 26, 7774-7778.	1.7	29
18	Microwave Spectra and Theoretical Calculations for Two Structural Isomers of Methylmanganese Pentacarbonyl. Inorganic Chemistry, 2020, 59, 6432-6438.	1.9	3

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19	Synthesis and characterisation of light lanthanide bis-phospholyl borohydride complexes. Dalton Transactions, 2020, 49, 6504-6511.	1.6	9
20	A double-dysprosocenium single-molecule magnet bound together with neutral ligands. Chemical Communications, 2020, 56, 5677-5680.	2.2	26
21	Low-coordinate rare-earth and actinide complexes. Fundamental Theories of Physics, 2019, , 1-87.	0.1	5
22	Studies of hysteresis and quantum tunnelling of the magnetisation in dysprosium(<scp>iii</scp>) single molecule magnets. Dalton Transactions, 2019, 48, 8541-8545.	1.6	71
23	Light Lanthanide Metallocenium Cations Exhibiting Weak Equatorial Anion Interactions. Chemistry - A European Journal, 2019, 25, 7749-7758.	1.7	29
24	Bis-Monophospholyl Dysprosium Cation Showing Magnetic Hysteresis at 48 K. Journal of the American Chemical Society, 2019, 141, 19935-19940.	6.6	123
25	Electronic structures of bent lanthanide(III) complexes with two N-donor ligands. Chemical Science, 2019, 10, 10493-10502.	3.7	25
26	Exploring Synthetic Routes to Heteroleptic UIII, UIV, and ThIVBulky Bis(silyl)amide Complexes. European Journal of Inorganic Chemistry, 2018, 2018, 2356-2362.	1.0	17
27	Chromium chains as polydentate fluoride ligands for actinides and group IV metals. Dalton Transactions, 2018, 47, 6361-6369.	1.6	2
28	Salt metathesis routes to homoleptic near-linear Mg(<scp>ii</scp>) and Ca(<scp>ii</scp>) bulky bis(silyl)amide complexes. Dalton Transactions, 2018, 47, 12526-12533.	1.6	14
29	Synthesis and structural characterization of lanthanum and cerium substituted cyclopentadienyl borohydride complexes. Journal of Organometallic Chemistry, 2018, 857, 45-51.	0.8	22
30	Thorium(IV) alkyl synthesis from a thorium(III) cyclopentadienyl complex and an N-heterocyclic olefin. Journal of Organometallic Chemistry, 2018, 857, 75-79.	0.8	9
31	The performance of density functional theory for the description of ground and excited state properties of inorganic and organometallic uranium compounds. Journal of Organometallic Chemistry, 2018, 857, 58-74.	0.8	30
32	Structural Characterization of Lithium and Sodium Bulky Bis(silyl)amide Complexes. Molecules, 2018, 23, 1138.	1.7	8
33	Uranium(III)-carbon multiple bonding supported by arene Î´-bonding in mixed-valence hexauranium nanometre-scale rings. Nature Communications, 2018, 9, 2097.	5.8	43
34	Terbocenium: completing a heavy lanthanide metallocenium cation family with an alternative anion abstraction strategy. Chemical Communications, 2018, 54, 9182-9185.	2.2	30
35	Heteroleptic samarium(<scp>iii</scp>) halide complexes probed by fluorescence-detected L₃-edge X-ray absorption spectroscopy. Dalton Transactions, 2018, 47, 10613-10625.	1.6	8
36	Analysis of Lanthanide-Radical Magnetic Interactions in Ce(III) 2,2â€²-Bipyridyl Complexes. Inorganic Chemistry, 2017, 56, 2496-2505.	1.9	30

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37	The inverse-trans-influence in tetravalent lanthanide and actinide bis(carbene) complexes. Nature Communications, 2017, 8, 14137.	5.8	128
38	Investigation into the Effects of a Trigonal-Planar Ligand Field on the Electronic Properties of Lanthanide(II) Tris(silylamide) Complexes (Ln = Sm, Eu, Tm, Yb). Inorganic Chemistry, 2017, 56, 5959-5970.	1.9	38
39	Double Reduction of 4,4â€²â€Bipyridine and Reductive Coupling of Pyridine by Two Thorium(III) Singleâ€Electron Transfers. Chemistry - A European Journal, 2017, 23, 2290-2293.	1.7	26
40	Actinide covalency measured by pulsed electron paramagnetic resonance spectroscopy. Nature Chemistry, 2017, 9, 578-583.	6.6	102
41	Molecular magnetic hysteresis at 60 kelvin in dysprosocenium. Nature, 2017, 548, 439-442.	13.7	1,450
42	Yttrium Methanide and Methanediide Bis(silyl)amide Complexes. Organometallics, 2017, 36, 4584-4590.	1.1	17
43	Synthesis and Electronic Structures of Heavy Lanthanide Metallocenium Cations. Journal of the American Chemical Society, 2017, 139, 18714-18724.	6.6	111
44	Activation of Heteroallenes COxS2-x(x= 0-2): Experimental and Theoretical Evidence of the Synthetic Versatility of a Bulky Guanidinato SmIIComplex. European Journal of Inorganic Chemistry, 2016, 2016, 792-796.	1.0	13
45	Physicochemical Properties of Near-Linear Lanthanide(II) Bis(silylamide) Complexes (Ln = Sm, Eu, Tm, Yb). Inorganic Chemistry, 2016, 55, 10057-10067.	1.9	66
46	New vistas in the molecular chemistry of thorium: low oxidation state complexes. Dalton Transactions, 2016, 45, 7537-7549.	1.6	61
47	Concomitant Carboxylate and Oxalate Formation From the Activation of CO₂ by a Thorium(III) Complex. Chemistry - A European Journal, 2016, 22, 17976-17979.	1.7	39
48	SmCp^R₂-mediated cross-coupling of allyl and propargyl ethers with ketoesters and a telescoped approach to complex cycloheptanols. Chemical Communications, 2016, 52, 13503-13506.	2.2	15
49	White phosphorus activation by a Th(<scp>iii</scp>) complex. Dalton Transactions, 2016, 45, 2390-2393.	1.6	30
50	Salt metathesis versus protonolysis routes for the synthesis of silylamide Hauser base (R2NMgX; X =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.6	16
51	Synthesis and Reactivity of a Cerium(III) Scorpionate Complex Containing a Redox Non-Innocent 2,2â€²-Bipyridine Ligand. Inorganics, 2015, 3, 534-553.	1.2	15
52	A structural investigation of heteroleptic lanthanide substituted cyclopentadienyl complexes. New Journal of Chemistry, 2015, 39, 7633-7639.	1.4	11
53	Homoleptic Trigonal Planar Lanthanide Complexes Stabilized by Superbulky Silylamide Ligands. Organometallics, 2015, 34, 2314-2325.	1.1	45
54	The first near-linear bis(amide) f-block complex: a blueprint for a high temperature single molecule magnet. Chemical Communications, 2015, 51, 101-103.	2.2	236

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55	Reactivity of the uranium(<scp>IV</scp>) carbene complex [U(BIPM^{TMS})(Cl)(Î¼-Cl)₂Li(THF)₂] (BIPM^{TMS}=) Tj ETQq1 1 0.784314 rgBT /Overlo substrates: metallo-Wittig, adduct formation, Câ€“F bond activation, and [2 + 2]-cycloaddition reactions. Dalton Transactions, 2014, 43, 14275-14283.	1.6	35
56	[U^{III}{N(SiMe₂tBu)₂}₃]: A Structurally Authenticated Trigonal Planar Actinide Complex. Chemistry - A European Journal, 2014, 20, 14579-14583.	1.7	39
57	The Inherent Singleâ€Molecule Magnet Character of Trivalent Uranium. Angewandte Chemie - International Edition, 2013, 52, 3430-3433.	7.2	102
58	Reactivity of the Yttrium Alkyl Carbene Complex [Y(BIPM)(CH₂C₆H₅)(THF)] (BIPM =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td ({C(PPh<sub> Substitutions, and Additions to Nontypical Transformations. Organometallics, 2013, 32, 1251-1264.	1.1	43
59	The Nature of the Uï£¾C Double Bond: Pushing the Stability of Highâ€Oxidationâ€State Uranium Carbenes to the Limit. Chemistry - A European Journal, 2013, 19, 7071-7083.	1.7	99
60	Reactivity Studies of a T-Shaped Yttrium Carbene: Câ€“F and Câ€“O Bond Activation and Câ•C Bond Formation Promoted by [Y(BIPM)(I)(THF)2] (BIPM = C(PPh2NSiMe3)2). Organometallics, 2013, 32, 1239-1250.	1.1	35
61	Synthesis and Characterisation of Lanthanide N-Trimethylsilyl and -Mesityl Functionalised Bis(iminophosphorano)methanides and -Methanediides. Inorganics, 2013, 1, 46-69.	1.2	18
62	Synthesis of a Uranium(VI)-Carbene: Reductive Formation of Uranyl(V)-Methanides, Oxidative Preparation of a [R₂Câ•Uâ•O]²⁺ Analogue of the [Oâ•Uâ•O]²⁺ Uranyl Ion (R = Ph₂PNSiMe₃), and Comparison of the Nature of U^{IV}â•C, U^Vâ•C, and U^{VI}â•C Double Bonds. Journal of the American Chemical Society, 2012, 134, 10047-10054.	6.6	163
63	Group 1 Bis(iminophosphorano)methanides, Part 2:N-Aryl Derivatives of the Sterically Demanding Methanes H2C(PPh2NR)2(R = 2,4,6-trimethylphenyl or 2,6-diisopropylphenyl). Organometallics, 2011, 30, 5326-5337.	1.1	22
64	Group 1 Bis(iminophosphorano)methanides, Part 1: N-Alkyl and Silyl Derivatives of the Sterically Demanding Methanes H₂C(PPh₂NR)₂ (R = Adamantyl and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.1	28
65	Early metal bis(phosphorus-stabilised)carbene chemistry. Chemical Society Reviews, 2011, 40, 2164.	18.7	153
66	A delocalized arene-bridged diuranium single-molecule magnet. Nature Chemistry, 2011, 3, 454-460.	6.6	299
67	Uraniumâ€“Carbon Multiple Bonding: Facile Access to the Pentavalent Uranium Carbene [U{C(PPh₂NSiMe₃)₂}(Cl)₂(I)] and Comparison of U^Vï£¾C and U^{IV}ï£¾C Bonds. Angewandte Chemie - International Edition, 2011, 50, 2383-2386.	7.2	132
68	Synthesis and Crystal Structures of Anionic Gallium(II) and Gallium(III) Heterocyclic Compounds Derived from a Gallium(I) N-Heterocyclic Carbene Analogue. Journal of Chemical Crystallography, 2010, 40, 965-969.	0.5	12
69	Gallium tri-chloride derivatives of the sterically demanding pyridines 2,6-Ar2C6H3N (Ar=2,4,6-Me3C6H2) Tj ETQq1 1 0.784314 rgBT /O	1.0	9
70	Synthesis and further reactivity studies of some transition metal gallyl complexes. Journal of Organometallic Chemistry, 2010, 695, 2410-2417.	0.8	35
71	Reactions of alkali metal and yttrium alkyls with a sterically demanding bis(aryloxysilyl)methane: Formation of aryloxide complexes by Si-O bond cleavage. Comptes Rendus Chimie, 2010, 13, 593-602.	0.2	10
72	Synthesis and characterization of neutral and cationic boron guanidinate complexes. Main Group Chemistry, 2010, 9, 23-30.	0.4	13

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73	Lanthanide tri-benzyl complexes: structural variations and useful precursors to phosphorus-stabilised lanthanide carbenes. Dalton Transactions, 2010, 39, 500-510.	1.6	100
74	Regioselective Câ^'H Activation and Sequential Câ^'C and Câ^'O Bond Formation Reactions of Aryl Ketones Promoted by an Yttrium Carbene. Journal of the American Chemical Society, 2010, 132, 14379-14381.	6.6	108
75	Low coordinate lanthanide(ii) complexes supported by bulky guanidinato and amidinato ligands. Dalton Transactions, 2010, 39, 1877.	1.6	68
76	X-ray Crystallographic Studies of |(LH)GaCl2| and |Li(THF)4||Ga(L)2| (L=C6H4(NCH2But)2-1,2). Main Group Metal Chemistry, 2009, 32, .	0.6	3
77	Ïƒ and Ï€â€…Donation in an Unsupported Uraniumâ€"Gallium Bond. Angewandte Chemie - International Edition, 2009, 48, 1077-1080.	7.2	136
78	Heteroleptic [M(CH₂C₆H₅)₂(I)(THF)₃] Complexes (M = Y or Er): Remarkably Stable Precursors to Yttrium and Erbium T-Shaped Carbenes. Organometallics, 2009, 28, 6771-6776.	1.1	64
79	A Heterobimetallic Gallyl Complex Containing an Unsupported Gaâ^'Y Bond. Inorganic Chemistry, 2009, 48, 3520-3522.	1.9	77
80	Synthesis and reactivity of the yttrium-alkyl-carbene complex [Y(BIPM)(CH2C6H5)(THF)] (BIPM =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	67
81	Metalâ€"metal bonds in f-element chemistry. Dalton Transactions, 2009, , 5592.	1.6	106
82	Investigations into the preparation of groups 13â€"15 N-heterocyclic carbene analogues. Inorganica Chimica Acta, 2008, 361, 427-435.	1.2	53
83	Synthesis and structural characterisation of group 10 metal(ii) gallyl complexes: analogies with platinum diboration catalysts?. Dalton Transactions, 2008, , 4395.	1.6	44
84	Flexible coordination of bulky amidinates and guanidinates towards rhodium(i): conversion of kinetic to thermodymanic isomers. Dalton Transactions, 2008, , 4799.	1.6	28
85	A Lanthanideâ^'Gallium Complex Stabilized by the N-Heterocyclic Carbene Group. Journal of the American Chemical Society, 2007, 129, 5360-5361.	6.6	113
86	Group 9 and 11 Metal(I) Gallyl Complexes Stabilized by N-Heterocyclic Carbene Coordination:Â First Structural Characterization of Gaâ^'M (M = Cu or Ag) Bonds. Organometallics, 2007, 26, 3424-3430.	1.1	76
87	The reactivity of gallium-(i), -(ii) and -(iii) heterocycles towards Group 15 substrates: attempts to prepare galliumâ€"terminal pnictinidene complexes. Dalton Transactions, 2006, , 64-72.	1.6	48
88	Facile Transformations of a 1,3,5-Triphosphacyclohexadienyl Anion within the Coordination Sphere of Group 13 and 14 Elements:Â Synthesis of 1,3-Diphosphacyclopentadienyl Complexes and Phosphaorganometallic Cage Compounds. Organometallics, 2006, 25, 4799-4807.	1.1	38
89	Synthesis, Structural Characterization, and Theoretical Studies of Complexes of Magnesium and Calcium with Gallium Heterocycles. Inorganic Chemistry, 2006, 45, 3146-3148.	1.9	67
90	Complexes of an Anionic Gallium(I) N-Heterocyclic Carbene Analogue with Group 14 Element(II) Fragments:â€‰ Synthetic, Structural and Theoretical Studies. Inorganic Chemistry, 2006, 45, 7242-7251.	1.9	80

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91	Oxidative addition of an imidazolium cation to an anionic gallium(I) N-heterocyclic carbene analogue: Synthesis and characterisation of novel gallium hydride complexes. Journal of Organometallic Chemistry, 2006, 691, 3060-3064.	0.8	62
92	An X-ray Crystallographic Study of the Diphosphacyclobutenyl Gallium Complex, [GaI2{C(But)P(H)C(But)=P}]2. Main Group Metal Chemistry, 2006, 29, .	0.6	0
93	An EPR and ENDOR Investigation of a Series of Diazabutadiene-Group 13 Complexes. Chemistry - A European Journal, 2005, 11, 2972-2982.	1.7	65
94	The reactivity of gallium(i) and indium(i) halides towards bipyridines, terpyridines, imino-substituted pyridines and bis(imino)acenaphthenes. New Journal of Chemistry, 2004, 28, 207.	1.4	92
95	Silylamides: towards a half-century of stabilising remarkable f-element chemistry. Organometallic Chemistry, 0, , 123-156.	0.6	13
96	Bis(phosphorus-stabilised)methanide and methandiide derivatives of group 1–5 and f-element metals. Organometallic Chemistry, 0, , 29-55.	0.6	47