

Andrew J Gaunt

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	2.2.2-Cryptand complexes of neptunium(Np^{III}) and plutonium(Pu^{III}). <i>Chemical Communications</i> , 2022, 58, 997-1000.	4.1	8
2	A terminal neptunium(V) mono(oxo) complex. <i>Nature Chemistry</i> , 2022, 14, 342-349.	13.6	19
3	Carbene Complexes of Neptunium. <i>Journal of the American Chemical Society</i> , 2022, 144, 9764-9774.	13.7	7
4	Expanding the Nonaqueous Chemistry of Neptunium: Synthesis and Structural Characterization of $[\text{Np}(\text{NR})_2(\text{CMe}_2\text{CH}_2)_3\text{Cl}]$, $[\text{Np}(\text{NR})_2(\text{CMe}_2\text{CH}_2)_3\text{Cl}]^+$, and $[\text{Np}(\text{NR})_2(\text{CMe}_2\text{CH}_2)_3\text{Cl}]^+$ ($\text{R} = \text{SiMe}_3$). <i>Inorganic Chemistry</i> , 2021, 60, 2740-2748.	4.0	11
5	Structural and Spectroscopic Comparison of Soft vs. Hard Donor Bonding in Trivalent Americium/Neodymium Molecules (<i>Angew. Chem.</i> 17/2021). <i>Angewandte Chemie</i> , 2021, 133, 9812-9812.	2.0	0
6	Structural and Spectroscopic Comparison of Soft vs. Hard Donor Bonding in Trivalent Americium/Neodymium Molecules. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9459-9466.	13.8	23
7	Structural and Spectroscopic Comparison of Soft vs. Hard Donor Bonding in Trivalent Americium/Neodymium Molecules. <i>Angewandte Chemie</i> , 2021, 133, 9545-9552.	2.0	4
8	Complexation and redox chemistry of neptunium, plutonium and americium with a hydroxylaminate ligand. <i>Chemical Science</i> , 2021, 12, 13343-13359.	7.4	13
9	Isolation and characterization of a californium metallocene. <i>Nature</i> , 2021, 599, 421-424.	27.8	25
10	$[\text{An}(\text{THF})_4]$ ($\text{An} = \text{Np}, \text{Pu}$) Preparation Bypassing An^{0} Metal Precursors: Access to $\text{Np}^{\text{3+}}$ / $\text{Pu}^{\text{3+}}$ Nonaqueous and Organometallic Complexes. <i>Journal of the American Chemical Society</i> , 2021, 143, 20680-20696.	13.7	14
11	A Single Small-Scale Plutonium Redox Reaction System Yields Three Crystallographically-Characterizable Organoplutonium Complexes. <i>Inorganic Chemistry</i> , 2020, 59, 13301-13314.	4.0	23
12	Intercomparison of the Radio-Chronometric Ages of Plutonium-Certified Reference Materials with Distinct Isotopic Compositions. <i>Analytical Chemistry</i> , 2019, 91, 11643-11652.	6.5	28
13	Structural and Spectroscopic Comparison of Soft vs. Hard Donor Bonding in Trivalent Americium/Neodymium Molecules (<i>Angew. Chem.</i> 34/2019). <i>Angewandte Chemie</i> , 2019, 131, 12050-12050.	2.0	0
14	In-Plane Thorium(IV), Uranium(IV), and Neptunium(IV) Expanded Porphyrin Complexes. <i>Journal of the American Chemical Society</i> , 2019, 141, 17867-17874.	13.7	28
15	$[\text{Am}(\text{C}_5\text{Me}_4\text{H})_3]$: An Organometallic Americium Complex. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11695-11699.	13.8	29
16	$[\text{Am}(\text{C}_5\text{Me}_4\text{H})_3]$: An Organometallic Americium Complex. <i>Angewandte Chemie</i> , 2019, 131, 11821-11825.	2.0	16
17	Sample seal-and-drop device and methodology for high temperature oxide melt solution calorimetric measurements of PuO_2 . <i>Review of Scientific Instruments</i> , 2019, 90, 044101.	1.3	14
18	Plutonium coordination and redox chemistry with the $\text{CyMe}_4\text{-BTPhen}$ polydentate N-donor extractant ligand. <i>Chemical Communications</i> , 2018, 54, 12582-12585.	4.1	10

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19	Non-aqueous neptunium and plutonium redox behaviour in THF – access to a rare Np(III) synthetic precursor. <i>Chemical Communications</i> , 2018, 54, 6113-6116.	4.1	18
20	Identification of the Formal +2 Oxidation State of Neptunium: Synthesis and Structural Characterization of {Np ^{II} [C ₅ H ₃ (SiMe ₃) ₂] ₃ } ⁺ . <i>Journal of the American Chemical Society</i> , 2018, 140, 7425-7428.	13.7	81
21	Identification of the Formal +2 Oxidation State of Plutonium: Synthesis and Characterization of {Pu ^{II} [C ₅ H ₃ (SiMe ₃) ₂] ₃ } ⁺ . <i>Journal of the American Chemical Society</i> , 2017, 139, 3970-3973.	13.7	121
22	Small-Scale Metal-Based Syntheses of Lanthanide Iodide, Amide, and Cyclopentadienyl Complexes as Analogues for Transuranic Reactions. <i>Inorganic Chemistry</i> , 2017, 56, 11981-11989.	4.0	22
23	Synthesis and characterization of potassium aryl- and alkyl-substituted silylchalcogenolate ligands. <i>Dalton Transactions</i> , 2016, 45, 9841-9852.	3.3	4
24	Neptunium and plutonium complexes with a sterically encumbered triamidoamine (TREN) scaffold. <i>Chemical Communications</i> , 2016, 52, 5428-5431.	4.1	26
25	A Linear <i>trans</i> -Bis(imido) Neptunium(V) Actinyl Analog: Np ^V (NDipp) ₂ (<i>trans</i> -Bu ₂ bipy) ₂ Cl (Dipp = 2,6-Pr ₂ C ₆ H ₃). <i>Journal of the American Chemical Society</i> , 2015, 137, 9583-9586.	13.7	33
26	Lanthanide(III) Di- and Tetra-Nuclear Complexes Supported by a Chelating Tripodal Tris(Amidate) Ligand. <i>Inorganic Chemistry</i> , 2015, 54, 4064-4075.	4.0	8
27	Unexpected Actinyl Cation-Directed Structural Variation in Neptunyl(VI) A-Type Tri-lacunary Heteropolyoxotungstate Complexes. <i>Inorganic Chemistry</i> , 2015, 54, 4192-4199.	4.0	14
28	Coordination chemistry of 2,2'-biphenylenedithiophosphinate and diphenyldithiophosphinate with U, Np, and Pu. <i>Dalton Transactions</i> , 2015, 44, 18923-18936.	3.3	31
29	Early-Lanthanide(III) Acetonitrile – Solvento Adducts with Iodide and Noncoordinating Anions. <i>Inorganic Chemistry</i> , 2015, 54, 11958-11968.	4.0	12
30	Synthesis and characterization of NpCl ₄ (DME) ₂ and PuCl ₄ (DME) ₂ neutral transuranic An(IV) starting materials. <i>Dalton Transactions</i> , 2014, 43, 1498-1501.	3.3	40
31	Recent Developments in Synthesis and Structural Chemistry of Nonaqueous Actinide Complexes. <i>Chemical Reviews</i> , 2013, 113, 1137-1198.	47.7	282
32	Uncovering f-element bonding differences and electronic structure in a series of 1% and 4% complexes with a diselenophosphinate ligand. <i>Chemical Science</i> , 2013, 4, 1189.	7.4	146
33	[N(<i>n</i> -Bu) ₄] ₂ [Pu(NO ₃) ₆] and [N(<i>n</i> -Bu) ₄] ₂ [PuCl ₆]: Starting Materials To Facilitate Nonaqueous Plutonium(IV) Chemistry. <i>Inorganic Chemistry</i> , 2012, 51, 9165-9167.	4.0	36
34	Bonding Trends Traversing the Tetravalent Actinide Series: Synthesis, Structural, and Computational Analysis of An ^{IV} (⁺ Ar ₄ acnac) ₄ Complexes (An = Th, U, Np, Pu); <i>Tj ETQqO 0 0 rgBT /Overlock 10 Tf 50</i>	4.0	76
35	8557-8566. Plutonium(IV) complexation by diglycolamide ligands – coordination chemistry insight into TODGA-based actinide separations. <i>Chemical Communications</i> , 2012, 48, 9732.	4.1	63
36	Synthesis and Coordination Chemistry of Phosphine Oxide Decorated Dibenzofuran Platforms. <i>Inorganic Chemistry</i> , 2012, 51, 6667-6681.	4.0	25

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37	Stabilising pentavalent actinidesâ€”visibleâ€”near infrared and X-ray absorption spectroscopic studies of the utility of the $[(\text{Np3W4O15})(\text{H}_2\text{O})_3(\text{MW9O33})_3]18\hat{\text{a}}^{\wedge}$ (M = Sb, Bi) structural type. Dalton Transactions, 2012, 41, 2003-2010.	3.3	13
38	Synthesis and Structure of $(\text{Ph})_4\text{P}_2\text{MCl}_6$ (M = Ti, Zr, Hf, Th, U, Np,) Tj ETQq000rgBT/Overlock	4.0	61
39	Differences in actinide metalâ€”ligand orbital interactions: comparison of U(iv) and Pu(iv) $\hat{\text{I}}^2$ -ketoiminate N,O donor complexes. Chemical Communications, 2011, 47, 7647.	4.1	26
40	Structural and Spectroscopic Characterization of Plutonyl(VI) Nitrate under Acidic Conditions. Inorganic Chemistry, 2011, 50, 4244-4246.	4.0	38
41	Recent developments in nonaqueous plutonium coordination chemistry. Comptes Rendus Chimie, 2010, 13, 821-831.	0.5	38
42	The Reaction Chemistry of Plutonyl(VI) Chloride Complexes with Triphenyl Phosphineoxide and Triphenyl Phosphinimine. Inorganic Chemistry, 2010, 49, 9554-9562.	4.0	27
43	Probing the 5f electrons in a plutonyl(vi) cluster complex. Dalton Transactions, 2009, , 5609.	3.3	17
44	Low-Valent Molecular Plutonium Halide Complexes. Inorganic Chemistry, 2008, 47, 8412-8419.	4.0	36
45	Covalency in the f Elementâ€”Chalcogen Bond. Computational Studies of $\text{M}[\text{N}(\text{EPR})_2]_3$ (M = La, Ce, Pr, Pm, Eu, U, Np, Pu, Am, Cm; E = O, S, Se,) Tj ETQq110784314	4.0	14
46	Structural Characterization of $\text{Pu}[\text{N}(\text{SiMe}_3)_2]_3$, a Synthetically Useful Nonaqueous Plutonium(III) Precursor. Inorganic Chemistry, 2008, 47, 26-28.	4.0	37
47	Experimental and Theoretical Comparison of Actinide and Lanthanide Bonding in $\text{M}[\text{N}(\text{EPR})_2]_3$ Complexes (M = U, Pu, La, Ce; E = S, Se, Te; R = Ph,) Tj ETQq110784314	4.0	14
48	Covalency in the f-elementâ€”chalcogen bond. Journal of Alloys and Compounds, 2007, 444-445, 369-375.	5.5	44
49	An entry route into non-aqueous plutonyl coordination chemistry. Chemical Communications, 2007, , 1659.	4.1	30
50	Redox Behavior of Cyclo[6]pyrrole in the Formation of a Uranyl Complex. Inorganic Chemistry, 2007, 46, 5143-5145.	4.0	64
51	Oxoneptunium(v) as part of the framework of a polyoxometalate. Chemical Communications, 2006, , 3788.	4.1	34
52	U(IV) Chalcogenolates Synthesized via Oxidation of Uranium Metal by Dichalcogenides. Inorganic Chemistry, 2006, 45, 7401-7407.	4.0	63
53	A Molecular Actinideâ€”Tellurium Bond and Comparison of Bonding in $[\text{MIII}\{\text{N}(\text{TePiPr}_2)_2\}_3]$ (M=U, La). Angewandte Chemie - International Edition, 2006, 45, 1638-1641.	13.8	68
54	Homoleptic uranium(iii) imidodiphosphinochalcogenides including the first structurally characterised molecular trivalent actinideâ€”Se bond. Chemical Communications, 2005, , 3215.	4.1	41

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55	Polyoxometal cations within polyoxometalate anions. Seven-coordinate uranium and zirconium heteroatom groups in $[(UO_2)_{12}(\frac{1}{4}O)_4(\frac{1}{4}H_2O)_{12}(P_2W_{15}O_{56})_4]^{32-}$ and $[Zr_4(\frac{1}{4}O)_2(\frac{1}{4}OH)_2(H_2O)_4(P_2W_{16}O_{59})_2]^{14-}$. Journal of Molecular Structure, 2003, 656, 101-106.	3.6	105
56	A novel zirconium polyoxometalate compound: $(NH_4)_9[Zr_2(\frac{1}{4}OH)(H_2O)_2(AsOH)_2(AsW_7O_{28})(AsW_{10}O_{36})] \cdot 26H_2O$. Acta Crystallographica Section C: Crystal Structure Communications, 2003, 59, i65-i66.	0.4	14
57	A rare structural characterisation of the phosphomolybdate lacunary anion, $[PMo_{11}O_{39}]^{7-}$. Crystal structures of the Ln(III) complexes, $(NH_4)_{11}[Ln(PMo_{11}O_{39})_2] \cdot 16H_2O$ (Ln = CeIII, SmIII, DyIII or LuIII). Dalton Transactions, 2003, , 2767-2771.	3.3	58
58	A Novel Zirconium Polyoxometalate Complex That Contains Both a Coordinated Saturated Anion, $[PMo_{12}O_{40}]^{3-}$, and a Coordinated Unsaturated Anion, $[PMo_{11}O_{39}]^{7-}$. Inorganic Chemistry, 2003, 42, 5049-5051.	4.0	44
59	A new structural family of heteropolytungstate lacunary complexes with the uranyl, UO_2^{2+} , cation. Dalton Transactions, 2003, , 3009.	3.3	79
60	The First Structural and Spectroscopic Characterization of a Neptunyl Polyoxometalate Complex. Journal of the American Chemical Society, 2002, 124, 13350-13351.	13.7	56
61	Title is missing!. Journal of Cluster Science, 2002, 13, 423-436.	3.3	62