

# Kenneth R Czerwinski

## List of Publications by Year in descending order

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88  
papers

1,462  
citations

304743

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docs citations

98  
times ranked

1190  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reaction Sequence and Kinetics of Uranium Nitride Decomposition. <i>Inorganic Chemistry</i> , 2009, 48, 10635-10642.	4.0	76
2	Phenylsilane as a safe, versatile alternative to hydrogen for the synthesis of actinide hydrides. <i>Chemical Communications</i> , 2015, 51, 17379-17381.	4.1	52
3	First-principles study of single-crystal uranium mono- and dinitride. <i>Chemical Physics Letters</i> , 2007, 443, 82-86.	2.6	46
4	Tuning the Oxidation State, Nuclearity, and Chemistry of Uranium Hydrides with Phenylsilane and Temperature: The Case of the Classic Uranium(III) Hydride Complex $[(C_5Me_5)_2U(\eta^4-H)]_2$ . <i>Organometallics</i> , 2016, 35, 617-620.	2.3	44
5	A new homogeneous polymer support based on syndiotactic polystyrene and its application in palladium-catalyzed Suzuki-Miyaura cross-coupling reactions. <i>Green Chemistry</i> , 2009, 11, 1576.	9.0	41
6	Magic numbers in small iron clusters: A first-principles study. <i>Chemical Physics Letters</i> , 2014, 613, 59-63.	2.6	36
7	Microscopic Characterization of Uranium Nitrides Synthesized by Oxidative Ammonolysis of Uranium Tetrafluoride. <i>Chemistry of Materials</i> , 2008, 20, 3076-3084.	6.7	35
8	Oxidative ammonolysis of uranium(IV) fluorides to uranium(VI) nitride. <i>Journal of Nuclear Materials</i> , 2008, 374, 75-78.	2.7	33
9	Octachloro- and Octabromoditechnetate(III) and Their Rhenium(III) Congeners. <i>Inorganic Chemistry</i> , 2008, 47, 1991-1999.	4.0	33
10	Speciation of heptavalent technetium in sulfuric acid: structural and spectroscopic studies. <i>Dalton Transactions</i> , 2010, 39, 8616.	3.3	33
11	Preparation of the Binary Technetium Bromides: $TcBr_3$ and $TcBr_4$ . <i>Journal of the American Chemical Society</i> , 2009, 131, 910-911.	13.7	32
12	The nature of the volatile technetium species formed during vitrification of borosilicate glass. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015, 306, 417-421.	1.5	32
13	Crystal structure of octabromoditechnetate(III) and a multi-configurational quantum chemical study of the $f^4 \rightarrow f^3$ transition in quadruply bonded $[M_2X_8]^{2-}$ dimers ( $M = Tc, Re; X = Cl, Br$ ). <i>Dalton Transactions</i> , 2009, , 5954.	3.3	31
14	Synthesis and Structure of Technetium Trichloride. <i>Journal of the American Chemical Society</i> , 2010, 132, 15864-15865.	13.7	31
15	Technetium Dichloride: A New Binary Halide Containing Metal-Metal Multiple Bonds. <i>Journal of the American Chemical Society</i> , 2011, 133, 8814-8817.	13.7	31
16	Technetium Chemistry in the Fuel Cycle: Combining Basic and Applied Studies. <i>Inorganic Chemistry</i> , 2013, 52, 3573-3578.	4.0	31
17	Technetium(IV) Halides Predicted from First-Principles. <i>Inorganic Chemistry</i> , 2009, 48, 6555-6558.	4.0	27
18	X-ray absorption fine structure spectroscopic study of uranium nitrides. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2012, 292, 989-994.	1.5	26

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19	Technetium: The First Radioelement on the Periodic Table. <i>Journal of Chemical Education</i> , 2017, 94, 320-326.	2.3	26
20	Reactivity of HTcO <sub>4</sub> with methanol in sulfuric acid: Tc-sulfate complexes revealed by XAFS spectroscopy and first principles calculations. <i>Dalton Transactions</i> , 2013, 42, 4348.	3.3	25
21	Uranium/technetium separation for the UREX process – synthesis and characterization of solid reprocessing forms. <i>Radiochimica Acta</i> , 2008, 96, 527-533.	1.2	24
22	Chemical Bonding and Aromaticity in Trinuclear Transition-Metal Halide Clusters. <i>Inorganic Chemistry</i> , 2011, 50, 1039-1046.	4.0	24
23	Reduction of Per technetate by Acetohydroxamic Acid: Formation of [Tc <sup>II</sup> (NO)(AHA) <sub>2</sub> (H <sub>2</sub> O)] <sup>+</sup> and Implications for the UREX Process. <i>Inorganic Chemistry</i> , 2008, 47, 6674-6680.	4.0	22
24	Synthesis, Structure Elucidation, and Redox Properties of <sup>99</sup> Tc Complexes of Lacunary Wellsâˆ™ Dawson Polyoxometalates: Insights into Molecular <sup>99</sup> Tcâˆ™ Metal Oxide Interactions. <i>Inorganic Chemistry</i> , 2011, 50, 1670-1681.	4.0	22
25	<sup>99</sup> Tc-Technetium Trichloride: Formation, Structure, and First-Principles Calculations. <i>Inorganic Chemistry</i> , 2012, 51, 4915-4917.	4.0	21
26	Interplay between structure, stoichiometry and properties of technetium nitrides. <i>Dalton Transactions</i> , 2011, 40, 6738.	3.3	20
27	Crystal and Electronic Structures of Neptunium Nitrides Synthesized Using a Fluoride Route. <i>Journal of the American Chemical Society</i> , 2012, 134, 3111-3119.	13.7	20
28	Recent Advances in Technetium Halide Chemistry. <i>Accounts of Chemical Research</i> , 2014, 47, 624-632.	15.6	20
29	An Americiumâˆ™Containing Metalâˆ™Organic Framework: A Platform for Studying Transplutonium Elements. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16508-16511.	13.8	20
30	Synthesis, structure, and first-principles calculations of [TcBr <sub>2</sub> (PMe <sub>3</sub> ) <sub>4</sub> ] and [Tc <sub>2</sub> Br <sub>4</sub> (PMe <sub>3</sub> ) <sub>4</sub> ] complexes. <i>Dalton Transactions</i> , 2009, , 10338.	3.3	19
31	Structural and magnetic properties of $\text{Tc}(\text{C}_{60})_n$ metalofullerenes: First-principles predictions. <i>Physical Review B</i> , 2010, 81, .		
32	Structural, Spectroscopic, and Multiconfigurational Quantum Chemical Investigations of the Electron-Rich Metalâˆ™Metal Triple-Bonded Tc <sub>2</sub> X <sub>4</sub> (PMe <sub>3</sub> ) <sub>4</sub> (X = Cl, Br) Complexes. <i>Inorganic Chemistry</i> , 2010, 49, 6646-6654.	4.0	19
33	The direct dissolution of Ce <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub> and electrochemical deposition of Ce species using ionic liquid trimethyl-n-butylammonium bis(trifluoromethanesulfonyl)imide containing bis(trifluoromethanesulfonyl)imide. <i>Electrochimica Acta</i> , 2013, 89, 144-151.	5.2	19
34	Technetium Tetrachloride Revisited: A Precursor to Lower-Valent Binary Technetium Chlorides. <i>Inorganic Chemistry</i> , 2012, 51, 8462-8467.	4.0	18
35	Trivalent Actinide and Lanthanide Complexation of 5,6-Dialkyl-2,6-bis(1,2,4-triazin-3-yl)pyridine (RBTP; R =) Tj ETQq1 1 0.784314 rgBT 52, 761-776.	4.0	18
36	Electrochemistry of soluble UO <sub>2</sub> <sup>2+</sup> from the direct dissolution of UO <sub>2</sub> CO <sub>3</sub> in acidic ionic liquid containing water. <i>Electrochimica Acta</i> , 2013, 93, 264-271.	5.2	18

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37	One-dimensional uranium-organic coordination polymers: crystal and electronic structures of uranyl-diacetohydroxamate. <i>Dalton Transactions</i> , 2011, 40, 6007.	3.3	17
38	Ditechnetium Heptoxide Revisited: Solid-State, Gas-Phase, and Theoretical Studies. <i>Inorganic Chemistry</i> , 2016, 55, 10445-10452.	4.0	17
39	Separation of Perchnetate from Uranium in a Simulated UREX Processing Solution Using Anion Exchange Extraction Chromatography. <i>Solvent Extraction and Ion Exchange</i> , 2013, 31, 416-429.	2.0	16
40	Molecular and Electronic Structures of $M_2O_7$ ( $M = Mn, Tc, Re$ ). <i>Inorganic Chemistry</i> , 2017, 56, 2448-2458.	4.0	16
41	Structural evolution and properties of subnanometer $Tc_n$ ( $n = 2-15$ ) clusters. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 10003.	2.8	15
42	Density Functional Analysis of the Trigonal Uranyl Equatorial Coordination in Hexahomotrioxacalix[3]arene-based Macrocyclic Complexes. <i>Inorganic Chemistry</i> , 2010, 49, 1465-1470.	4.0	15
43	Synthesis and Nanoscale Characterization of $(NH_4)_4ThF_8$ and $ThNF$ . <i>Inorganic Chemistry</i> , 2009, 48, 5736-5746.	4.0	14
44	Structural Studies of Technetium-Zirconium Alloys by X-ray Diffraction, High-Resolution Electron Microscopy, and First-Principles Calculations. <i>Inorganic Chemistry</i> , 2010, 49, 1433-1438.	4.0	14
45	XAFS spectroscopic study of $Tc_2(O_2CCH_3)_4X_2$ ( $X = Cl, Br$ ). <i>Journal of Coordination Chemistry</i> , 2008, 61, 2356-2370.	2.2	13
46	Structural and electronic trends in rare-earth technetate pyrochlores. <i>Dalton Transactions</i> , 2010, 39, 7207.	3.3	13
47	Comprehensive Solid-State NMR Characterization of Electronic Structure in Ditechnetium Heptoxide. <i>Journal of the American Chemical Society</i> , 2010, 132, 13138-13140.	13.7	13
48	Spectroscopic and structural characterization of reduced technetium species in acetate media. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2011, 288, 723-728.	1.5	13
49	On the nature of heptavalent technetium in concentrated nitric and perchloric acid. <i>Inorganica Chimica Acta</i> , 2013, 398, 147-150.	2.4	13
50	Review of technetium chemistry research conducted at the University of Nevada Las Vegas. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2009, 282, 605-609.	1.5	12
51	First evidence for the formation of technetium oxosulfide complexes: synthesis, structure and characterization. <i>Dalton Transactions</i> , 2012, 41, 6291.	3.3	12
52	Multi-configurational quantum chemical studies of the $Tc_2X_8^{n-}$ ( $X = Cl, Br; n = 2, 3$ ) anions. Crystallographic structure of octabromoditechnetate( $3^-$ ). <i>Dalton Transactions</i> , 2012, 41, 2869.	3.3	12
53	First-Principles and Kinetic Monte Carlo Simulation Studies of the Reactivity of $Tc(0001)$ , $MoTc(111)$ and $MoTc(110)$ Surfaces. <i>Journal of the Electrochemical Society</i> , 2014, 161, C83-C88.	2.9	11
54	Speciation and reactivity of heptavalent technetium in strong acids. <i>New Journal of Chemistry</i> , 2018, 42, 7522-7528.	2.8	11

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55	$\delta^2$ -Technetium Dichloride: Solid-State Modulated Structure, Electronic Structure, and Physical Properties. <i>Journal of the American Chemical Society</i> , 2013, 135, 15955-15962.	13.7	10
56	Application of Electron Microscopy in the Observation of Technetium and Technetium Dioxide Nanostructures. <i>Inorganic Chemistry</i> , 2008, 47, 11738-11744.	4.0	9
57	Probing the Presence of Multiple Metal-Metal Bonds in Technetium Chlorides by X-ray Absorption Spectroscopy: Implications for Synthetic Chemistry. <i>Inorganic Chemistry</i> , 2012, 51, 9563-9570.	4.0	9
58	A Trigonal-Prismatic Hexanuclear Technetium(II) Bromide Cluster: Solid-State Synthesis and Crystallographic and Electronic Structure. <i>Inorganic Chemistry</i> , 2013, 52, 5660-5662.	4.0	9
59	Hydrothermal synthesis and solid-state structure of $\text{Tc}_2(\mu_4\text{-O}_2\text{CCH}_3)_4\text{Cl}_2$ . <i>Polyhedron</i> , 2013, 58, 115-119.	2.2	8
60	Technetium incorporation in scheelite: insights from first-principles. <i>Dalton Transactions</i> , 2016, 45, 18171-18176.	3.3	8
61	Lanthanide Complexation of 2,6-Bis(5,6-dipyridyl-1,2,4-triazinyl)pyridine - Solvent- and Lanthanide-Dependent Controlled Ligand Coordination Mode and Denticity. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 921-927.	2.0	8
62	The Nature of the Technetium Species Formed During the Oxidation of Technetium Dioxide with Oxygen and Water. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 1137-1144.	2.0	8
63	Irradiation and isolation of fission products from uranium metal-organic frameworks. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2019, 320, 415-424.	1.5	8
64	Synthesis and characterization of the solid uranium(VI) dioxo-diacetohydroxamate complex. <i>Radiochimica Acta</i> , 2007, 95, 439-450.	1.2	7
65	Recent developments in the synthetic chemistry of technetium disulfide. <i>Dalton Transactions</i> , 2013, 42, 15540.	3.3	7
66	Thermal Expansion Behavior in $\text{TcO}_2$ . Toward Breaking the Tc-Tc Bond. <i>Inorganic Chemistry</i> , 2017, 56, 9219-9224.	4.0	7
67	First-principles study of the hexahalogenotechnetate(IV) ions $\text{TcX}_6^{2-}$ [X = Cl, Br]. <i>Chemical Physics Letters</i> , 2010, 487, 190-193.	2.6	6
68	Electrochemical Measurement of Gold Oxide Reduction and Methods for Acid Neutralization and Minimization of Water in Wet Ionic Liquid. <i>Electroanalysis</i> , 2014, 26, 2631-2638.	2.9	6
69	Diperoxo Pertechentic Acid Characterized by Spectroscopic and Quantum Chemical Studies. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 4595-4600.	2.0	5
70	Molecular and electronic structure of $\text{Tc}_2(\text{O}_2\text{CCH}_3)_2\text{Cl}_4$ studied by multiconfigurational quantum chemical methods. <i>Polyhedron</i> , 2014, 70, 144-147.	2.2	5
71	A Decade of Dinuclear Technetium Complexes with Multiple Metal-Metal Bonds. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 4484-4495.	2.0	5
72	Structural study of the ammonium octafluoroneptunate, $[\text{NH}_4]_4\text{NpF}_8$ . <i>Inorganica Chimica Acta</i> , 2016, 448, 93-96.	2.4	5

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73	Equation of state for technetium from X-ray diffraction and first-principle calculations. Journal of Physics and Chemistry of Solids, 2016, 95, 6-11.	4.0	5
74	Chemical and electrochemical behavior of metallic technetium in acidic media. Journal of Radioanalytical and Nuclear Chemistry, 2013, 298, 1809-1817.	1.5	4
75	Synthetic and Coordination Chemistry of the Heavier Trivalent Technetium Binary Halides: Uncovering Technetium Triiodide. Inorganic Chemistry, 2013, 52, 14309-14316.	4.0	4
76	Characterization of TcCl <sub>4</sub> and <sup>99m</sup> TcCl <sub>3</sub> by X-ray absorption fine structure spectroscopy. Journal of Radioanalytical and Nuclear Chemistry, 2014, 299, 235-239.	1.5	4
77	An Americium-Containing Metal-Organic Framework: A Platform for Studying Transplutonium Elements. Angewandte Chemie, 2019, 131, 16660-16663.	2.0	4
78	On the Structure of <sup>99m</sup> Tc-Molybdenum Dichloride. Inorganic Chemistry, 2012, 51, 4965-4971.	4.0	3
79	X-ray Crystallographic and First-Principles Theoretical Studies of K <sub>2</sub> [TcOCl <sub>5</sub> ] and UV/Vis Investigation of the [TcOCl <sub>5</sub> ] <sup>2-</sup> and [TcOCl <sub>4</sub> ] <sup>-</sup> Ions. European Journal of Inorganic Chemistry, 2013, 2013, 1097-1104.	2.0	3
80	Hydrothermal synthesis and solid-state structures of polynuclear technetium iodide compounds. Inorganica Chimica Acta, 2015, 424, 329-335.	2.4	3
81	Speciation of technetium peroxo complexes in sulfuric acid revisited. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1163-1167.	1.5	2
82	A UO <sub>2</sub> -based salt target for rapid isolation of fission products. Journal of Radioanalytical and Nuclear Chemistry, 2019, 319, 1291-1300.	1.5	2
83	Photochemical behavior of the quadruply metal-metal bonded [Tc <sub>2</sub> Cl <sub>8</sub> ] <sup>2-</sup> anion in acetonitrile. Inorganica Chimica Acta, 2016, 453, 724-727.	2.4	1
84	Molecular and Electronic Structure of Re <sub>2</sub> Br <sub>4</sub> (PMe <sub>3</sub> ) <sub>4</sub> . Inorganic Chemistry, 2016, 55, 7111-7116.	4.0	1
85	An Atomistic Understanding of the Unusual Thermal Behavior of the Molecular Oxide Tc <sub>2</sub> O <sub>7</sub> . Inorganic Chemistry, 2019, 58, 5468-5475.	4.0	1
86	Solvothermal synthesis and solid-state characterization of metal-metal bonded tetracarboxylatoditechnetium(II,III) polymers. Polyhedron, 2020, 180, 114418.	2.2	1
87	Decontamination of a Technetium Contaminated Fume Hood in a Research Laboratory. Health Physics, 2011, 101, S124-S130.	0.5	0
88	Separation of uranium and the early lanthanides from a mixture of their oxides utilizing hexafluoroacetylacetonate. Journal of Radioanalytical and Nuclear Chemistry, 2015, 303, 1399-1403.	1.5	0