

# Kenneth R Czerwinski

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10410002/publications.pdf>

Version: 2024-02-01

88  
papers

1,462  
citations

304743

22  
h-index

434195

31  
g-index

98  
all docs

98  
docs citations

98  
times ranked

1190  
citing authors

#	ARTICLE	IF	CITATIONS
1	Solvothermal synthesis and solid-state characterization of metal-metal bonded tetracarboxylatoditechnetium(II,III) polymers. <i>Polyhedron</i> , 2020, 180, 114418.	2.2	1
2	An Americium-Containing Metal-Organic Framework: A Platform for Studying Transplutonium Elements. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16508-16511.	13.8	20
3	An Americium-Containing Metal-Organic Framework: A Platform for Studying Transplutonium Elements. <i>Angewandte Chemie</i> , 2019, 131, 16660-16663.	2.0	4
4	A UO <sub>2</sub> -based salt target for rapid isolation of fission products. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2019, 319, 1291-1300.	1.5	2
5	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
6	An Atomistic Understanding of the Unusual Thermal Behavior of the Molecular Oxide Tc <sub>2</sub> O <sub>7</sub> . <i>Inorganic Chemistry</i> , 2019, 58, 5468-5475.	4.0	1
7	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
8	Speciation and reactivity of heptavalent technetium in strong acids. <i>New Journal of Chemistry</i> , 2018, 42, 7522-7528.	2.8	11
9	Molecular and Electronic Structures of M <sub>2</sub> O <sub>7</sub> (M = Mn, Tc, Re). <i>Inorganic Chemistry</i> , 2017, 56, 2448-2458.	4.0	16
10	Technetium: The First Radioelement on the Periodic Table. <i>Journal of Chemical Education</i> , 2017, 94, 320-326.	2.3	26
11	Thermal Expansion Behavior in TcO <sub>2</sub> . Toward Breaking the Tc-Tc Bond. <i>Inorganic Chemistry</i> , 2017, 56, 9219-9224.	4.0	7
12	Structural study of the ammonium octafluoroneptunate, [NH <sub>4</sub> ] <sub>4</sub> NpF <sub>8</sub> . <i>Inorganica Chimica Acta</i> , 2016, 448, 93-96.	2.4	5
13	Equation of state for technetium from X-ray diffraction and first-principle calculations. <i>Journal of Physics and Chemistry of Solids</i> , 2016, 95, 6-11.	4.0	5
14	Photochemical behavior of the quadruply metal-metal bonded [Tc <sub>2</sub> Cl <sub>8</sub> ] <sup>2-</sup> anion in acetonitrile. <i>Inorganica Chimica Acta</i> , 2016, 453, 724-727.	2.4	1
15	Molecular and Electronic Structure of Re <sub>2</sub> Br <sub>4</sub> (PMe <sub>3</sub> ) <sub>4</sub> . <i>Inorganic Chemistry</i> , 2016, 55, 7111-7116.	4.0	1
16	Technetium incorporation in scheelite: insights from first-principles. <i>Dalton Transactions</i> , 2016, 45, 18171-18176.	3.3	8
17	Ditechnetium Heptoxide Revisited: Solid-State, Gas-Phase, and Theoretical Studies. <i>Inorganic Chemistry</i> , 2016, 55, 10445-10452.	4.0	17
18	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

#	ARTICLE	IF	CITATIONS
19	Tuning the Oxidation State, Nuclearity, and Chemistry of Uranium Hydrides with Phenylsilane and Temperature: The Case of the Classic Uranium(III) Hydride Complex $[(C_5Me_5)_2U(\frac{1}{4}H)]_2$ . <i>Organometallics</i> , 2016, 35, 617-620.	2.3	44
20	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
21	Speciation of technetium peroxo complexes in sulfuric acid revisited. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015, 303, 1163-1167.	1.5	2
22	Separation of uranium and the early lanthanides from a mixture of their oxides utilizing hexafluoroacetylacetonate. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015, 303, 1399-1403.	1.5	0
23	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
24	Hydrothermal synthesis and solid-state structures of polynuclear technetium iodide compounds. <i>Inorganica Chimica Acta</i> , 2015, 424, 329-335.	2.4	3
25	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
26	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
27	Characterization of TcCl <sub>4</sub> and $\hat{I}^2$ -TcCl <sub>3</sub> by X-ray absorption fine structure spectroscopy. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2014, 299, 235-239.	1.5	4
28	Molecular and electronic structure of Tc <sub>2</sub> (O <sub>2</sub> CCH <sub>3</sub> ) <sub>2</sub> Cl <sub>4</sub> studied by multiconfigurational quantum chemical methods. <i>Polyhedron</i> , 2014, 70, 144-147.	2.2	5
29	Recent Advances in Technetium Halide Chemistry. <i>Accounts of Chemical Research</i> , 2014, 47, 624-632.	15.6	20
30	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
31	Magic numbers in small iron clusters: A first-principles study. <i>Chemical Physics Letters</i> , 2014, 613, 59-63.	2.6	36
32	Chemical and electrochemical behavior of metallic technetium in acidic media. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2013, 298, 1809-1817.	1.5	4
33	$\hat{I}^2$ -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
34	Separation of Pertechnetate 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
35	Recent developments in the synthetic chemistry of technetium disulfide. <i>Dalton Transactions</i> , 2013, 42, 15540.	3.3	7
36	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

#	ARTICLE	IF	CITATIONS
37	Diperoxo Pertechentic Acid Characterized by Spectroscopic and Quantum Chemical Studies. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 4595-4600.	2.0	5
38	Hydrothermal synthesis and solid-state structure of $Tc_2(\mu_4-O_2CCH_3)_4Cl_2$ . <i>Polyhedron</i> , 2013, 58, 115-119.	2.2	8
39	Trivalent Actinide and Lanthanide Complexation of 5,6-Dialkyl-2,6-bis(1,2,4-triazin-3-yl)pyridine (RBTP; R =) <i>Tj ETQq1 1 0.784314 rgBT</i> 52, 761-776.	4.0	18
40	The direct dissolution of $Ce_2(CO_3)_3$ 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
41	On the nature of heptavalent technetium in concentrated nitric and perchloric acid. <i>Inorganica Chimica Acta</i> , 2013, 398, 147-150.	2.4	13
42	X-ray Crystallographic and First-Principles Theoretical Studies of $K_2[TcOCl_5]$ and UV/Vis Investigation of the $[TcOCl_5]^{2-}$ and $[TcOCl_4]^{-}$ Ions. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 1097-1104.	2.0	3
43	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
44	Technetium Chemistry in the Fuel Cycle: Combining Basic and Applied Studies. <i>Inorganic Chemistry</i> , 2013, 52, 3573-3578.	4.0	31
45	Synthetic and Coordination Chemistry of the Heavier Trivalent Technetium Binary Halides: Uncovering Technetium Triiodide. <i>Inorganic Chemistry</i> , 2013, 52, 14309-14316.	4.0	4
46	Electrochemistry of soluble $UO_2^{2+}$ from the direct dissolution of $UO_2CO_3$ in acidic ionic liquid containing water. <i>Electrochimica Acta</i> , 2013, 93, 264-271.	5.2	18
47	First evidence for the formation of technetium oxosulfide complexes: synthesis, structure and characterization. <i>Dalton Transactions</i> , 2012, 41, 6291.	3.3	12
48	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
49	Multi-configurational quantum chemical studies of the $Tc_2X_8n^{+}$ ( $X = Cl, Br; n = 2, 3$ ) anions. Crystallographic structure of octabromoditechnetate ( $3a^{+}$ ). <i>Dalton Transactions</i> , 2012, 41, 2869.	3.3	12
50	On the Structure of $\mu_2$ -Molybdenum Dichloride. <i>Inorganic Chemistry</i> , 2012, 51, 4965-4971.	4.0	3
51	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
52	$\mu_2$ -Technetium Trichloride: Formation, Structure, and First-Principles Calculations. <i>Inorganic Chemistry</i> , 2012, 51, 4915-4917.	4.0	21
53	Technetium Tetrachloride Revisited: A Precursor to Lower-Valent Binary Technetium Chlorides. <i>Inorganic Chemistry</i> , 2012, 51, 8462-8467.	4.0	18
54	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

#	ARTICLE	IF	CITATIONS
55	Interplay between structure, stoichiometry and properties of technetium nitrides. Dalton Transactions, 2011, 40, 6738.	3.3	20
56	Synthesis, Structure Elucidation, and Redox Properties of $^{99}\text{Tc}$ Complexes of Lacunary Wellsâˆ™Dawson Polyoxometalates: Insights into Molecular $^{99}\text{Tc}$ Metal Oxide Interactions. Inorganic Chemistry, 2011, 50, 1670-1681.	4.0	22
57	Chemical Bonding and Aromaticity in Trinuclear Transition-Metal Halide Clusters. Inorganic Chemistry, 2011, 50, 1039-1046.	4.0	24
58	Decontamination of a Technetium Contaminated Fume Hood in a Research Laboratory. Health Physics, 2011, 101, S124-S130.	0.5	0
59	Technetium Dichloride: A New Binary Halide Containing Metalâˆ™Metal Multiple Bonds. Journal of the American Chemical Society, 2011, 133, 8814-8817.	13.7	31
60	One-dimensional uraniumâˆ™organic coordination polymers: crystal and electronic structures of uranyl-diacetohydroxamate. Dalton Transactions, 2011, 40, 6007.	3.3	17
61	Spectroscopic and structural characterization of reduced technetium species in acetate media. Journal of Radioanalytical and Nuclear Chemistry, 2011, 288, 723-728.	1.5	13
62	First-principles study of the hexahalogenotechnetate(IV) ions $\text{TcX}_6^{2-}$ [X = Cl, Br]. Chemical Physics Letters, 2010, 487, 190-193.	2.6	6
63	Density Functional Analysis of the Trigonal Uranyl Equatorial Coordination in Hexahomotrioxacalix[3]arene-based Macrocyclic Complexes. Inorganic Chemistry, 2010, 49, 1465-1470.	4.0	15
64	Structural and magnetic properties of $\langle \text{Tc} \rangle$ metalofullerenes: First-principles predictions. Physical Review B, 2010, 81, .	1.5	11
65	Synthesis and Structure of Technetium Trichloride. Journal of the American Chemical Society, 2010, 132, 15864-15865.	13.7	31
66	Structural and electronic trends in rare-earth technetate pyrochlores. Dalton Transactions, 2010, 39, 7207.	3.3	13
67	Structural, Spectroscopic, and Multiconfigurational Quantum Chemical Investigations of the Electron-Rich Metalâˆ™Metal Triple-Bonded $\text{Tc}_2\text{X}_4(\text{PMe}_3)_4$ (X = Cl, Br) Complexes. Inorganic Chemistry, 2010, 49, 6646-6654.	4.0	19
68	Comprehensive Solid-State NMR Characterization of Electronic Structure in Ditechnetium Heptoxide. Journal of the American Chemical Society, 2010, 132, 13138-13140.	13.7	13
69	Structural Studies of Technetiumâˆ™Zirconium Alloys by X-ray Diffraction, High-Resolution Electron Microscopy, and First-Principles Calculations. Inorganic Chemistry, 2010, 49, 1433-1438.	4.0	14
70	Speciation of heptavalent technetium in sulfuric acid: structural and spectroscopic studies. Dalton Transactions, 2010, 39, 8616.	3.3	33
71	Review of technetium chemistry research conducted at the University of Nevada Las Vegas. Journal of Radioanalytical and Nuclear Chemistry, 2009, 282, 605-609.	1.5	12
72	Preparation of the Binary Technetium Bromides: $\text{TcBr}_3$ and $\text{TcBr}_4$ . Journal of the American Chemical Society, 2009, 131, 910-911.	13.7	32

#	ARTICLE	IF	CITATIONS
73	Technetium(IV) Halides Predicted from First-Principles. <i>Inorganic Chemistry</i> , 2009, 48, 6555-6558.	4.0	27
74	Synthesis and Nanoscale Characterization of (NH <sub>4</sub> ) <sub>4</sub> ThF <sub>8</sub> and ThNF. <i>Inorganic Chemistry</i> , 2009, 48, 5736-5746.	4.0	14
75	Crystal structure of octabromoditechnetate(iii) and a multi-configurational quantum chemical study of the $1\hat{a}1^*$ transition in quadruply bonded [M <sub>2</sub> X <sub>8</sub> ] <sub>2</sub> <sup>2+</sup> dimers (M = Tc, Re; X = Cl, Br). <i>Dalton Transactions</i> , 2009, , 5954.	3.3	31
76	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
77	Reaction Sequence and Kinetics of Uranium Nitride Decomposition. <i>Inorganic Chemistry</i> , 2009, 48, 10635-10642.	4.0	76
78	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
79	Structural evolution and properties of subnanometer Tc <sub>n</sub> (n = 2-15) clusters. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 10003.	2.8	15
80	Oxidative ammonolysis of uranium(IV) fluorides to uranium(VI) nitride. <i>Journal of Nuclear Materials</i> , 2008, 374, 75-78.	2.7	33
81	Reduction of Pertechnetate 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
82	Microscopic Characterization of Uranium Nitrides Synthesized by Oxidative Ammonolysis of Uranium Tetrafluoride. <i>Chemistry of Materials</i> , 2008, 20, 3076-3084.	6.7	35
83	Application of Electron Microscopy in the Observation of Technetium and Technetium Dioxide Nanostructures. <i>Inorganic Chemistry</i> , 2008, 47, 11738-11744.	4.0	9
84	Octachloro- and Octabromoditechnetate(III) and Their Rhenium(III) Congeners. <i>Inorganic Chemistry</i> , 2008, 47, 1991-1999.	4.0	33
85	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
86	XAFS spectroscopic study of Tc <sub>2</sub> (O <sub>2</sub> CCH <sub>3</sub> ) <sub>4</sub> X <sub>2</sub> (X = Cl, Br). <i>Journal of Coordination Chemistry</i> , 2008, 61, 2356-2370.	2.2	13
87	Synthesis and characterization of the solid uranium(VI) dioxo-diacetohydroxamate complex. <i>Radiochimica Acta</i> , 2007, 95, 439-450.	1.2	7
88	First-principles study of single-crystal uranium mono- and dinitride. <i>Chemical Physics Letters</i> , 2007, 443, 82-86.	2.6	46