Jan Pieter Glatzel

List of Publications by Year
in descending order

231 papers	14,718 citations	18482 62 h-index	22166 113 g-index
243 all docs	243 docs citations	243 times ranked	13669 citing authors

#	Article	IF	Citations
1	The Structure of the First Coordination Shell in Liquid Water. Science, 2004, 304, 995-999.	12.6	1,287
2	High resolution 1s core hole X-ray spectroscopy in 3d transition metal complexesâ€"electronic and structural information. Coordination Chemistry Reviews, 2005, 249, 65-95.	18.8	830
3	X-ray damage to the Mn4Ca complex in single crystals of photosystem II: A case study for metalloprotein crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12047-12052.	7.1	585
4	Simultaneous Femtosecond X-ray Spectroscopy and Diffraction of Photosystem II at Room Temperature. Science, 2013, 340, 491-495.	12.6	378
5	Absence of Mn-Centered Oxidation in the S2â†' S3Transition:Â Implications for the Mechanism of Photosynthetic Water Oxidation. Journal of the American Chemical Society, 2001, 123, 7804-7820.	13.7	295
6	A combined in situ time-resolved UVâ€"Vis, Raman and high-energy resolution X-ray absorption spectroscopy study on the deactivation behavior of Pt and PtSn propane dehydrogenation catalysts under industrial reaction conditions. Journal of Catalysis, 2010, 276, 268-279.	6.2	256
7	Biotic and abiotic products of Mn(II) oxidation by spores of the marineBacillus sp.strain SG-1. American Mineralogist, 2005, 90, 143-154.	1.9	237
8	The 1s x-ray absorption pre-edge structures in transition metal oxides. Journal of Physics Condensed Matter, 2009, 21, 104207.	1.8	231
9	Chemical State of Complex Uranium Oxides. Physical Review Letters, 2013, 111, 253002.	7.8	212
10	Activation of Oxygen on Gold/Alumina Catalysts: In Situ High-Energy-Resolution Fluorescence and Time-Resolved X-ray Spectroscopy. Angewandte Chemie - International Edition, 2006, 45, 4651-4654.	13.8	208
11	Taking snapshots of photosynthetic water oxidation using femtosecond X-ray diffraction and spectroscopy. Nature Communications, 2014, 5, 4371.	12.8	206
12	X-ray emission spectroscopy. Photosynthesis Research, 2009, 102, 255-266.	2.9	197
13	High-Resolution Mn EXAFS of the Oxygen-Evolving Complex in Photosystem II:Â Structural Implications for the Mn4Ca Cluster. Journal of the American Chemical Society, 2005, 127, 14974-14975.	13.7	189
14	The Electronic Structure of Mn in Oxides, Coordination Complexes, and the Oxygen-Evolving Complex of Photosystem II Studied by Resonant Inelastic X-ray Scattering. Journal of the American Chemical Society, 2004, 126, 9946-9959.	13.7	177
15	The Nuclearity of the Active Site for Methane to Methanol Conversion in Cu-Mordenite: A Quantitative Assessment. Journal of the American Chemical Society, 2018, 140, 15270-15278.	13.7	177
16	Nanoflow electrospinning serial femtosecond crystallography. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 1584-1587.	2.5	167
17	In Situ X-ray Absorption of Co/Mn/TiO2Catalysts for Fischerâˆ'Tropsch Synthesis. Journal of Physical Chemistry B, 2004, 108, 16201-16207.	2.6	165
18	Identification of a spin-coupled Mo(<scp>iii</scp>) in the nitrogenase ironâ€"molybdenum cofactor. Chemical Science, 2014, 5, 3096-3103.	7.4	164

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19	Identification of CO Adsorption Sites in Supported Pt Catalysts Using High-Energy-Resolution Fluorescence Detection X-ray Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 16162-16164.	2.6	163
20	Absence of Ce³⁺ Sites in Chemically Active Colloidal Ceria Nanoparticles. ACS Nano, 2013, 7, 10726-10732.	14.6	160
21	Programmed Iron Oxide Nanoparticles Disintegration in Anaerobic Digesters Boosts Biogas Production. Small, 2014, 10, 2801-2808.	10.0	153
22	Room temperature femtosecond X-ray diffraction of photosystem II microcrystals. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9721-9726.	7.1	144
23	Bulk-sensitive XAS characterization of light elements: from X-ray Raman scattering to X-ray Raman spectroscopy. Microchemical Journal, 2002, 71, 221-230.	4.5	141
24	Accurate macromolecular structures using minimal measurements from X-ray free-electron lasers. Nature Methods, 2014, 11, 545-548.	19.0	140
25	X-ray Emission Spectroscopy To Study Ligand Valence Orbitals in Mn Coordination Complexes. Journal of the American Chemical Society, 2009, 131, 13161-13167.	13.7	135
26	Molybdenum Speciation and its Impact on Catalytic Activity during Methane Dehydroaromatization in Zeolite ZSMâ€5 as Revealed by Operando Xâ€Ray Methods. Angewandte Chemie - International Edition, 2016, 55, 5215-5219.	13.8	133
27	Reflections on hard X-ray photon-in/photon-out spectroscopy for electronic structure studies. Journal of Electron Spectroscopy and Related Phenomena, 2013, 188, 17-25.	1.7	128
28	Generating Highly Active Partially Oxidized Platinum during Oxidation of Carbon Monoxide over Pt/Al₂O₃: In Situ, Timeâ€Resolved, and Highâ€Energyâ€Resolution Xâ€Ray Absorption Spectroscopy. Angewandte Chemie - International Edition, 2008, 47, 9260-9264.	13.8	119
29	Nearest-neighbor oxygen distances in liquid water and ice observed by x-ray Raman based extended x-ray absorption fine structure. Journal of Chemical Physics, 2007, 127, 174504.	3.0	118
30	Manganese KÎ² X-ray Emission Spectroscopy As a Probe of Metalâ€"Ligand Interactions. Inorganic Chemistry, 2011, 50, 8397-8409.	4.0	118
31	Energy-dispersive X-ray emission spectroscopy using an X-ray free-electron laser in a shot-by-shot mode. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19103-19107.	7.1	113
32	Hard X-ray photon-in photon-out spectroscopy. Catalysis Today, 2009, 145, 294-299.	4.4	112
33	In Situ Characterization of the 5d Density of States of Pt Nanoparticles upon Adsorption of CO. Journal of the American Chemical Society, 2010, 132, 2555-2557.	13.7	111
34	Formation of Mercury Sulfide from Hg(II)â€"Thiolate Complexes in Natural Organic Matter. Environmental Science & Technology, 2015, 49, 9787-9796.	10.0	111
35	1s2p Resonant Inelastic X-ray Scattering of Iron Oxides. Journal of Physical Chemistry B, 2005, 109, 20751-20762.	2.6	108
36	Valence-to-Core X-ray Emission Spectroscopy Identification of Carbide Compounds in Nanocrystalline Cr Coatings Deposited from Cr(III) Electrolytes Containing Organic Substances. Journal of Physical Chemistry B, 2006, 110, 23192-23196.	2.6	104

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37	X-ray Raman spectroscopy at the oxygenKedge of water and ice:â€ƒ Implications on local structure models. Physical Review B, 2002, 66, .	3.2	101
38	Structural snapshots of the SCR reaction mechanism on Cu-SSZ-13. Chemical Communications, 2015, 51, 9227-9230.	4.1	101
39	Picosecond Timeâ€Resolved Xâ€Ray Emission Spectroscopy: Ultrafast Spinâ€State Determination in an Iron Complex. Angewandte Chemie - International Edition, 2010, 49, 5910-5912.	13.8	99
40	Site-Selective EXAFS in Mixed-Valence Compounds Using High-Resolution Fluorescence Detection:â€‰ A Study of Iron in Prussian Blue. Inorganic Chemistry, 2002, 41, 3121-3127.	4.0	95
41	Mn K-Edge XANES and KÎ² XES Studies of Two Mnâˆ’Oxo Binuclear Complexes:Â Investigation of Three Different Oxidation States Relevant to the Oxygen-Evolving Complex of Photosystem II. Journal of the American Chemical Society, 2001, 123, 7031-7039.	13.7	94
42	Electronic Structure of Sulfur Studied by X-ray Absorption and Emission Spectroscopy. Analytical Chemistry, 2009, 81, 6516-6525.	6.5	93
43	Five-element Johann-type x-ray emission spectrometer with a single-photon-counting pixel detector. Review of Scientific Instruments, 2011, 82, 065107.	1.3	93
44	Structure and Orientation of the Mn4Ca Cluster in Plant Photosystem II Membranes Studied by Polarized Range-extended X-ray Absorption Spectroscopy*. Journal of Biological Chemistry, 2007, 282, 7198-7208.	3.4	91
45	Comment on "Energetics of Hydrogen Bond Network Rearrangements in Liquid Water". Science, 2005, 308, 793a-793a.	12.6	90
46	Spin-state studies with XES and RIXS: From static to ultrafast. Journal of Electron Spectroscopy and Related Phenomena, 2013, 188, 166-171.	1.7	87
47	Valence to Core Xâ€ray Emission Spectroscopy. Advanced Materials, 2014, 26, 7730-7746.	21.0	87
48	Examination of the influence of La promotion on Ni state in hydrotalcite-derived catalysts under CO2 methanation reaction conditions: Operando X-ray absorption and emission spectroscopy investigation. Applied Catalysis B: Environmental, 2018, 232, 409-419.	20.2	87
49	Carbon K-edge X-ray Raman spectroscopy supports simple, yet powerful description of aromatic hydrocarbons and asphaltenes. Chemical Physics Letters, 2003, 369, 184-191.	2.6	85
50	Catalysts at work: From integral to spatially resolved X-ray absorption spectroscopy. Catalysis Today, 2009, 145, 267-278.	4.4	85
51	Observing Solvation Dynamics with Simultaneous Femtosecond X-ray Emission Spectroscopy and X-ray Scattering. Journal of Physical Chemistry B, 2016, 120, 1158-1168.	2.6	85
52	Spectroscopic characterization of microscopic hydrogen-bonding disparities in supercritical water. Journal of Chemical Physics, 2005, 123, 154503.	3.0	79
53	Direct Detection of Oxygen Ligation to the Mn₄Ca Cluster of Photosystem II by Xâ€ray Emission Spectroscopy. Angewandte Chemie - International Edition, 2010, 49, 800-803.	13.8	78
54	KÎ²-Detected XANES of Framework-Substituted FeZSM-5 Zeolites. Journal of Physical Chemistry B, 2004, 108, 10002-10011.	2.6	77

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55	Metalâ€“Ligand Covalency of Iron Complexes from High-Resolution Resonant Inelastic X-ray Scattering. Journal of the American Chemical Society, 2013, 135, 17121-17134.	13.7	75
56	Biogenesis of Mercuryâ€“Sulfur Nanoparticles in Plant Leaves from Atmospheric Gaseous Mercury. Environmental Science & Technology, 2018, 52, 3935-3948.	10.0	75
57	In Vivo Formation of HgSe Nanoparticles and Hgâ€“Tetraselenolate Complex from Methylmercury in Seabirdsâ€”Implications for the Hgâ€“Se Antagonism. Environmental Science & Technology, 2021, 55, 1515-1526.	10.0	75
58	Single Au Atom Doping of Silver Nanoclusters. ACS Nano, 2018, 12, 12751-12760.	14.6	74
59	Detailed Characterization of a Nanosecond-Lived Excited State: X-ray and Theoretical Investigation of the Quintet State in Photoexcited [Fe(terpy)₂]²⁺. Journal of Physical Chemistry C, 2015, 119, 5888-5902.	3.1	72
60	Resonant X-ray spectroscopy to study K absorption pre-edges in 3d transition metal compounds. European Physical Journal: Special Topics, 2009, 169, 207-214.	2.6	70
61	Probing Longâ€Lived Plasmonicâ€Generated Charges in TiO₂/Au by Highâ€Resolution Xâ€ray Absorption Spectroscopy. Angewandte Chemie - International Edition, 2015, 54, 5413-5416.	13.8	67
62	V oxidation state in Feâ€“Ti oxides by high-energy resolution fluorescence-detected X-ray absorption spectroscopy. Physics and Chemistry of Minerals, 2011, 38, 449-458.	0.8	65
63	Identification of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Dy</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn><m as Electron Trap in Persistent Phosphors. Physical Review Letters, 2020, 125, 033001.	7.8	64
64	High-resolution molybdenum K-edge X-ray absorption spectroscopy analyzed with time-dependent density functional theory. Physical Chemistry Chemical Physics, 2013, 15, 20911.	2.8	62
65	High energy-resolution x-ray spectroscopy at ultra-high dilution with spherically bent crystal analyzers of 0.5 m radius. Review of Scientific Instruments, 2017, 88, 013108.	1.3	62
66	The oxidation state of vanadium in titanomagnetite from layered basic intrusions. American Mineralogist, 2006, 91, 953-956.	1.9	61
67	Chemical composition and structural transformations of amorphous chromium coatings electrodeposited from Cr(III) electrolytes. Electrochimica Acta, 2010, 56, 145-153.	5.2	61
68	Direct study of the f-electron configuration in lanthanide systems. Journal of Analytical Atomic Spectrometry, 2011, 26, 1265.	3.0	61
69	Demethylation of Methylmercury in Bird, Fish, and Earthworm. Environmental Science & Technology, 2021, 55, 1527-1534.	10.0	61
70	Visualizing a Catalyst at Work during the Ignition of the Catalytic Partial Oxidation of Methane. Journal of Physical Chemistry C, 2009, 113, 3037-3040.	3.1	60
71	Hard x-ray emission spectroscopy: a powerful tool for the characterization of magnetic semiconductors. Semiconductor Science and Technology, 2014, 29, 023002.	2.0	60
72	Unravelling the Different Reaction Pathways for Low Temperature CO Oxidation on Pt/CeO₂ and Pt/Al₂O₃ by Spatially Resolved Structureâ€“Activity Correlations. Journal of Physical Chemistry Letters, 2019, 10, 7698-7705.	4.6	58

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73	Electronic Structural Changes of Mn in the Oxygen-Evolving Complex of Photosystem II during the Catalytic Cycle. Inorganic Chemistry, 2013, 52, 5642-5644.	4.0	57
74	Structure, Bonding, and Stability of Mercury Complexes with Thiolate and Thioether Ligands from High-Resolution XANES Spectroscopy and First-Principles Calculations. Inorganic Chemistry, 2015, 54, 11776-11791.	4.0	57
75	Sulfur-Metal Orbital Hybridization in Sulfur-Bearing Compounds Studied by X-ray Emission Spectroscopy. Inorganic Chemistry, 2010, 49, 6468-6473.	4.0	56
76	Effect of alkalis on the Fe oxidation state and local environment in peralkaline rhyolitic glasses. American Mineralogist, 2012, 97, 468-475.	1.9	55
77	Chemical Sensitivity of KÎ² and KÎ± X-ray Emission from a Systematic Investigation of Iron Compounds. Inorganic Chemistry, 2020, 59, 12518-12535.	4.0	55
78	Orbital hybridization and spin polarization in the resonant<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mi>s</mml:mi></mml:mrow></mml:math>photoexcitations of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub><mml:mi mathvariant="normal">Fe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvarian	3.2	54
79	Preference towards Fiveâ€Coordination in Ti Silicaliteâ€1 upon Molecular Adsorption. ChemPhysChem, 2013, 14, 79-83.	2.1	53
80	Chemical Forms of Mercury in Human Hair Reveal Sources of Exposure. Environmental Science & Technology, 2016, 50, 10721-10729.	10.0	53
81	Cr local environment by valence-to-core X-ray emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2009, 24, 215-223.	3.0	52
82	X-ray linear dichroism in cubic compounds: The case of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mtext>Cr</mml:mtext></mml:mrow><mml:mrow><mml:mn>3</mml:mr xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>MgAl</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:m Physical Review B, 2008, 78, .	3.2	50
83	Influence of the core hole onKÎ²emission following photoionization or orbital electron capture: A comparison using MnO and55Fe2O3. Physical Review B, 2001, 64, .	3.2	49
84	Range-extended EXAFS at theLedge of rare earths using high-energy-resolution fluorescence detection: A study of La in LaOCl. Physical Review B, 2005, 72, .	3.2	49
85	The nature of the active site in the Fe-ZSM-5/N2O system studied by (resonant) inelastic X-ray scattering. Catalysis Today, 2007, 126, 127-134.	4.4	49
86	Toward Highlighting the Ultrafast Electron Transfer Dynamics at the Optically Dark Sites of Photocatalysts. Journal of Physical Chemistry Letters, 2013, 4, 1972-1976.	4.6	49
87	Spatial imaging of carbon reactivity centers in Pd/C catalytic systems. Chemical Science, 2015, 6, 3302-3313.	7.4	49
88	Ligand Identification in Titanium Complexes Using X-ray Valence-to-Core Emission Spectroscopy. Inorganic Chemistry, 2010, 49, 8323-8332.	4.0	48
89	Intrinsic deviations in fluorescence yield detected x-ray absorption spectroscopy: the case of the transition metal L_{2,3}edges. Journal of Physics Condensed Matter, 2012, 24, 452201.	1.8	47
90	Investigation of the valence electronic states of Ti(iv) in Ti silicalite-1 coupling X-ray emission spectroscopy and density functional calculations. Physical Chemistry Chemical Physics, 2011, 13, 19409.	2.8	46

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91	Direct evidence for an interdiffused intermediate layer in bi-magnetic coreâ€“shell nanoparticles. Nanoscale, 2014, 6, 11911-11920.	5.6	46
92	High-energy resolution X-ray absorption and emission spectroscopy reveals insight into unique selectivity of La-based nanoparticles for CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15803-15808.	7.1	46
93	High-resolution X-ray spectroscopy of rare events: a different look at local structure and chemistry. Journal of Synchrotron Radiation, 2001, 8, 199-203.	2.4	45
94	Thermal deformation of cryogenically cooled silicon crystals under intense X-ray beams: measurement and finite-element predictions ofÂtheÂsurface shape. Journal of Synchrotron Radiation, 2013, 20, 567-580.	2.4	45
95	High Energy Resolution X-ray Absorption Spectroscopy of Environmentally Relevant Lead(II) Compounds. Inorganic Chemistry, 2009, 48, 10748-10756.	4.0	43
96	Manipulating Mnâ€“Mgk cation complexes to control the charge- and spin-state of Mn in GaN. Scientific Reports, 2012, 2, 722.	3.3	43
97	The role of Hartreeâ€“Fock exchange in the simulation of X-ray absorption spectra: A study of photoexcited. Chemical Physics Letters, 2013, 580, 179-184.	2.6	43
98	Inner-Shell Excitation Spectroscopy of Fused-Ring Aromatic Molecules by Electron Energy Loss and X-ray Raman Techniques. Journal of Physical Chemistry A, 2003, 107, 8512-8520.	2.5	42
99	Crystal-field excitations in NiO studied with hard x-ray resonant inelastic x-ray scattering at the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Ni</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:mi>K</mml:mi></mml:mrow></m Physical Review B, 2008, 78, .	3.2	42
100	High-resolution structure of the photosynthetic Mn₄Ca catalyst from X-ray spectroscopy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1139-1147.	4.0	42
101	X-ray Spectroscopic Study of Solvent Effects on the Ferrous and Ferric Hexacyanide Anions. Journal of Physical Chemistry A, 2014, 118, 9411-9418.	2.5	42
102	Element substitution by living organisms: the case of manganese in mollusc shell aragonite. Scientific Reports, 2016, 6, 22514.	3.3	42
103	Oxidation and Luminescence Quenching of Europium in BaMgAl₁₀O₁₇ Blue Phosphors. Chemistry of Materials, 2017, 29, 10122-10129.	6.7	41
104	Strong<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math>-edge Magnetic Circular Dichroism Observed in Photon-inâ€“Photon-out Spectroscopy. Physical Review Letters, 2010, 105, 037202.	7.8	39
105	Revealing the Chemical Form of â€œInvisibleâ€• Gold in Natural Arsenian Pyrite and Arsenopyrite with High Energy-Resolution X-ray Absorption Spectroscopy. ACS Earth and Space Chemistry, 2019, 3, 1905-1914.	2.7	39
106	Anisotropic valenceâ†’core x-ray fluorescence from a [Rh(en)3][Mn(N)(CN)5]â‹…H2O single crystal: Experimental results and density functional calculations. Journal of Chemical Physics, 2002, 116, 2011-2015.	3.0	38
107	The electronic structure in 3d transition metal complexes: Can we measure oxidation states?. Journal of Physics: Conference Series, 2009, 190, 012046.	0.4	38
108	A new method of directly determining the coreâ€“hole effect in the Ce L3 XAS of mixed valence Ce compoundsâ€”An application of resonant X-ray emission spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2011, 184, 210-215.	1.7	38

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109	Unusual Coordination Behavior of Cr3+in Microporous Aluminophosphates. Journal of Physical Chemistry B, 2006, 110, 716-722.	2.6	37
110	Valence-to-Core-Detected X-ray Absorption Spectroscopy: Targeting Ligand Selectivity. Journal of the American Chemical Society, 2014, 136, 10076-10084.	13.7	37
111	Molybdenum Speciation and its Impact on Catalytic Activity during Methane Dehydroaromatization in Zeolite ZSMâ€5 as Revealed by Operando Xâ€Ray Methods. Angewandte Chemie, 2016, 128, 5301-5305.	2.0	37
112	Chemical Forms of Mercury in Pyrite: Implications for Predicting Mercury Releases in Acid Mine Drainage Settings. Environmental Science & Technology, 2018, 52, 10286-10296.	10.0	37
113	On the Presence of Fe(IV) in Fe-ZSM-5 and FeSrO3-xUnequivocal Detection of the 3d4Spin System by Resonant Inelastic X-ray Scattering. Journal of Physical Chemistry B, 2006, 110, 18104-18107.	2.6	36
114	Mn oxidation states in tri- and tetra-nuclear Mn compounds structurally relevant to photosystem II: Mn K-edge X-ray absorption and K? X-ray emission spectroscopy studies. Physical Chemistry Chemical Physics, 2004, 6, 4864.	2.8	35
115	Real-space Greenâ€™s function approach to resonant inelastic x-ray scattering. Physical Review B, 2011, 83, .	3.2	34
116	Spectator and participator processes in the resonant photon-in and photon-out spectra at the Ce L3 edge of CeO2. European Physical Journal B, 2012, 85, 1.	1.5	33
117	High energy resolution core-level X-ray spectroscopy for electronic and structural characterization of osmium compounds. Physical Chemistry Chemical Physics, 2013, 15, 16152.	2.8	33
118	Silica-supported Ti chloride tetrahydrofuranates, precursors of Zieglerâ€“Natta catalysts. Dalton Transactions, 2013, 42, 12706.	3.3	33
119	Separation of Two-Electron Photoexcited Atomic Processes near the Inner-Shell Threshold. Physical Review Letters, 2009, 102, 143001.	7.8	32
120	Electronic Structure of Ni Complexes by X-ray Resonance Raman Spectroscopy (Resonant Inelastic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	13.7	31
121	Resonant inelastic X-ray scattering (RIXS) spectroscopy at the Mn K absorption pre-edgeâ€"a direct probe of the 3d orbitals. Journal of Physics and Chemistry of Solids, 2005, 66, 2163-2167.	4.0	31
122	XAS and XES Techniques Shed Light on the Dark Side of Zieglerâ€“Natta Catalysts: Activeâ€Site Generation. ChemCatChem, 2015, 7, 1432-1437.	3.7	31
123	Multiplet splitting and valence-shell recoupling in the core-level2pphotoelectron spectrum of atomic Mn and of Mn compounds. Physical Review A, 2001, 63, .	2.5	30
124	Divalent Mercury in Dissolved Organic Matter Is Bioavailable to Fish and Accumulates as Dithiolate and Tetrathiolate Complexes. Environmental Science & Technology, 2019, 53, 4880-4891.	10.0	30
125	High Resolution K Capture X-ray Fluorescence Spectroscopy:Â A New Tool for Chemical Characterization. Journal of the American Chemical Society, 1999, 121, 4926-4927.	13.7	29
126	Hard X-ray Photon-In Photon-Out Spectroscopy. Synchrotron Radiation News, 2009, 22, 12-16.	0.8	29

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127	In situ XAS with high-energy resolution: The changing structure of platinum during the oxidation of carbon monoxide. Catalysis Today, 2009, 145, 300-306.	4.4	29
128	HERFD XAS/ATR-FTIR batch reactor cell. Physical Chemistry Chemical Physics, 2012, 14, 2164-2170.	2.8	29
129	Improving the quality of XAFS data. Journal of Synchrotron Radiation, 2018, 25, 972-980.	2.4	29
130	Small changes in Cu redox state and speciation generate large isotope fractionation during adsorption and incorporation of Cu by a phototrophic biofilm. Geochimica Et Cosmochimica Acta, 2018, 220, 1-18.	3.9	28
131	Resonant inelastic X-ray scattering determination of the electronic structure of oxyhemoglobin and its model complex. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2854-2859.	7.1	28
132	Electronic structure changes in cobalt phthalocyanine due to nanotube encapsulation probed using resonant inelastic X-ray scattering. Physical Chemistry Chemical Physics, 2010, 12, 9693.	2.8	27
133	Geometric and Electronic Structure of Î±-Oxygen Sites in Mn-ZSM-5 Zeolites. Journal of Physical Chemistry C, 2008, 112, 12409-12416.	3.1	26
134	Evolution of charge and spin state of transition metals in the LaMn1â^{ˆ’}xCoxO3 perovskite series. Journal of Applied Physics, 2008, 103, 07C907.	2.5	26
135	X-Ray Raman Spectroscopyâ€"A New Tool to Study Local Structure of Aromatic Hydrocarbons and Asphaltenes. Petroleum Science and Technology, 2004, 22, 863-875.	1.5	25
136	Spin-orbit sensitive hard x-ray probe of the occupied and unoccupied<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>5</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:math>density of states. Physical Review B, 2011, 84, .	3.2	25
137	Spectroscopic and adsorptive studies of a thermally robust pyrazolato-based PCP. Dalton Transactions, 2012, 41, 4012.	3.3	25
138	Experimental evidence of Xe incorporation in Schottky defects in UO2. Applied Physics Letters, 2015, 106, .	3.3	25
139	Hard x-ray probe to study doping-dependent electron redistribution and strong covalency inLa1â^'xSr1+xMnO4. Physical Review B, 2010, 82, .	3.2	24
140	High-resolution Mn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math>-edge x-ray emission and absorption spectroscopy study of the electronic and local structure of the three different phases in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">d</mml:mi><mml:mro	3.2	24
141	Benchtop Nonresonant X-ray Emission Spectroscopy: Coming Soon to Laboratories and XAS Beamlines Near You?. Journal of Physics: Conference Series, 2016, 712, 012036.	0.4	24
142	Electronic properties of epitaxial cerium oxide films during controlled reduction and oxidation studied by resonant inelastic X-ray scattering. Physical Chemistry Chemical Physics, 2016, 18, 20511-20517.	2.8	24
143	Evidence of Mott physics in iron pnictides from x-ray spectroscopy. Physical Review B, 2017, 96, .	3.2	24
144	Mercury(II) Binding to Metallothionein in <i>Mytilus edulis</i> revealed by High Energyâ€Resolution XANES Spectroscopy. Chemistry - A European Journal, 2019, 25, 997-1009.	3.3	23

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145	Valence satellite and 3p photoelectron spectra of atomic Fe and Cu. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 2539-2547.	1.5	22
146	A tool to plan photon-in/photon-out experiments: count rates, dips and self-absorption. Journal of Synchrotron Radiation, 2012, 19, 911-919.	2.4	22
147	Behavior of fission gases in nuclear fuel: XAS characterization of Kr in UO2. Journal of Nuclear Materials, 2015, 466, 379-392.	2.7	22
148	Insights into the Synthesis Mechanism of Ag₂₉ Nanoclusters. Journal of Physical Chemistry C, 2018, 122, 28351-28361.	3.1	22
149	Damages Induced by Synchrotron Radiation-Based X-ray Microanalysis in Chrome Yellow Paints and Related Cr-Compounds: Assessment, Quantification, and Mitigation Strategies. Analytical Chemistry, 2020, 92, 14164-14173.	6.5	22
150	Electrochemical transformation of Fe-N-C catalysts into iron oxides in alkaline medium and its impact on the oxygen reduction reaction activity. Applied Catalysis B: Environmental, 2022, 311, 121366.	20.2	22
151	Anions relative location in the group-V sublattice ofGaAsSbNâˆ•GaAsepilayers: XAFS measurements and simulations. Physical Review B, 2007, 75, .	3.2	21
152	Single Impurity Anderson Model versus Density Functional Theory for Describing Ce<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>L</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>X-Ray Absorption Spectra of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>CeFe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>: Resolution of a Recent Controversy. Physical Review Letters, 2012, 108, 036403.	7.8	21
153	dd Excitations in CPO-27-Ni Metalâ€"Organic Framework: Comparison between Resonant Inelastic X-ray Scattering and UVâ€"vis Spectroscopy. Inorganic Chemistry, 2013, 52, 5633-5635.	4.0	21
154	Hard x-ray absorption spectroscopy for pulsed sources. Physical Review B, 2013, 87, .	3.2	21
155	New reflections on hard X-ray photon-in/photon-out spectroscopy. Nanoscale, 2020, 12, 16270-16284.	5.6	21
156	Chemical Forms of Mercury in Blue Marlin Billfish: Implications for Human Exposure. Environmental Science and Technology Letters, 2021, 8, 405-411.	8.7	21
157	Electronic structure and local environment of substitutional V3+ in grossular garnet Ca3Al2(SiO4)3: K-edge X-ray absorption spectroscopy and first-principles modeling. American Mineralogist, 2010, 95, 1161-1171.	1.9	20
158	TEXS: in-vacuum tender X-ray emission spectrometer with 11 Johansson crystal analyzers. Journal of Synchrotron Radiation, 2020, 27, 813-826.	2.4	19
159	The five-analyzer point-to-point scanning crystal spectrometer at ESRF ID26. Journal of Synchrotron Radiation, 2021, 28, 362-371.	2.4	19
160	Study of N-bridged diiron phthalocyanine relevant to methane oxidation: Insight into oxidation and spin states from high resolution 1s core hole X-ray spectroscopy. Applied Catalysis B: Environmental, 2012, 113-114, 43-51.	20.2	18
161	Thermal distortion minimization by geometry optimization for water-cooled white beam mirror or multilayer optics. Journal of Physics: Conference Series, 2013, 425, 052029.	0.4	18
162	Site-Selective High-Resolution X-ray Absorption Spectroscopy and High-Resolution X-ray Emission Spectroscopy of Cobalt Nanoparticles. Inorganic Chemistry, 2014, 53, 8367-8375.	4.0	18

#	Article	IF	Citations
163	Resonant Inelastic X-ray Scattering of Molybdenum Oxides and Sulfides. Journal of Physical Chemistry C, 2015, 119, 2419-2426.	3.1	18
164	Long-range interactions in the effective low-energy Hamiltonian of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="bold">Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="bold">IrO</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> : A core-to-core resonant inelastic x-ray scattering study. Physical Review B, 2017, 95, .	3.2	18
165	The Mode of Incorporation of As(-I) and Se(-I) in Natural Pyrite Revisited. ACS Earth and Space Chemistry, 2020, 4, 379-390.	2.7	18
166	Chemical state of phosphorus in amorphous Niâ€“Feâ€“P electroplates. Surface and Coatings Technology, 2015, 275, 239-244.	4.8	17
167	1s2p resonant inelastic x-ray scattering-magnetic circular dichroism: A sensitive probe of 3d magnetic moments using hard x-ray photons. Journal of Applied Physics, 2012, 111, 07E301.	2.5	16
168	Spectroscopic properties of $$hbox {Cr}^{3+}$$ Cr 3 + in the spinel solid solution $$hbox {ZnAl}_{2-x}hbox {Cr}_{x}hbox {O}_4$$ ZnAl 2 - x Cr x O 4. Physics and Chemistry of Minerals, 2016, 43, 33-42.	0.8	16
169	Resonant X-ray emission spectroscopy reveals dâ€“d ligand-field states involved in the self-assembly of a square-planar platinum complex. Physical Chemistry Chemical Physics, 2012, 14, 15278.	2.8	14
170	Photo-electrochemical hydrogen production from neutral phosphate buffer and seawater using micro-structured p-Si photo-electrodes functionalized by solution-based methods. Sustainable Energy and Fuels, 2018, 2, 2215-2223.	4.9	14
171	Spin-Orbit Mediated Interference in the Radiative and Nonradiative Channels of the La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>4</mml:mn><mml:mi>d</mml:mi></mml:math>Core Resonances. Physical Review Letters, 2009, 103, 137401.	7.8	13
172	Yb Valence States in YbC₂: A HERFD-XANES Spectroscopic Investigation. Inorganic Chemistry, 2011, 50, 5587-5595.	4.0	13
173	Architecture of the Ti(IV) Sites in TiAlPO-5 Determined Using Ti K-Edge X-ray Absorption and X-ray Emission Spectroscopies. Journal of Physical Chemistry C, 2014, 118, 11745-11751.	3.1	13
174	Electron transfer during selenium reduction by iron surfaces in aqueous solution: High resolution X-ray absorption study. Journal of Physics: Conference Series, 2009, 190, 012191.	0.4	11
175	Spin-polarized electronic structure of the coreâ€“shell ZnO/ZnO:Mn nanowires probed by X-ray absorption and emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2013, 28, 1629.	3.0	11
176	Multiple excitations in the K fluorescence emission of Mn, Fe and Ni compounds. AIP Conference Proceedings, 2003, , .	0.4	10
177	Noncollinear Ordering of the Orbital Magnetic Moments in Magnetite. Physical Review Letters, 2019, 123, 207201.	7.8	10
178	Intramolecular Hgâ‹¯Ï€ interactions of d-character with non-bridging atoms in mercuryâ€“aryl complexes. Dalton Transactions, 2016, 45, 14035-14038.	3.3	9
179	Acute Toxicity of Divalent Mercury to Bacteria Explained by the Formation of Dicysteinate and Tetracysteinate Complexes Bound to Proteins in <i>Escherichia coli</i> and <i>Bacillus subtilis</i>. Environmental Science & Technology, 2021, 55, 3612-3623.	10.0	9
180	Oxidation States and Structure of the Manganese Cluster in the S0 State of the Oxygen Evolving Complex. , 1998, , 1279-1282.		9

#	Article	IF	Citations
181	Dynamic Role of Gold <i>d</i>-Orbitals during CO Oxidation under Aerobic Conditions. ACS Catalysis, 2022, 12, 3615-3627.	11.2	9
182	Crystal Chemistry of Thallium in Marine Ferromanganese Deposits. ACS Earth and Space Chemistry, 2022, 6, 1269-1285.	2.7	9
183	High Energy Resolution Fluorescence Detection X-Ray Absorption Spectroscopy: Detection of Adsorption Sites in Supported Metal Catalysts. AIP Conference Proceedings, 2007, , .	0.4	8
184	Elucidation of the chemical state of phosphorus and boron in crystallographically amorphous nickel electroplates. Russian Journal of Electrochemistry, 2010, 46, 1223-1229.	0.9	8
185	High resolution spectroscopy of 2p6â†’2p53d resonantly excited atomic Ca. Journal of Electron Spectroscopy and Related Phenomena, 1999, 101-103, 39-42.	1.7	7
186	A Study of Transition Metal K Absorption PreEdges by Resonant Inelastic XRay Scattering RIXS. Physica Scripta, 2005, , 1032.	2.5	7
187	Temperature-Driven Self-Doping in Magnetite. Physical Review Letters, 2021, 127, 186402.	7.8	7
188	vuv photoionization of uv-laser-tailored Ni-like Cu3d9atoms. Physical Review A, 1999, 60, R737-R740.	2.5	6
189	Resonant 3p photoelectron spectroscopy of free Cu atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 1563-1573.	1.5	6
190	Influence of the nature and environment of manganese in Mn-BEA zeolites on NO conversion in selective catalytic reduction with ammonia. Physical Chemistry Chemical Physics, 2017, 19, 13553-13561.	2.8	6
191	Application of valence-to-core X-ray emission spectroscopy for identification and estimation of amount of carbon covalently bonded to chromium in amorphous Cr-C coatings prepared by magnetron sputtering. Applied Surface Science, 2018, 427, 566-572.	6.1	6
192	A microstructured p-Si photocathode outcompetes Pt as a counter electrode to hematite in photoelectrochemical water splitting. Dalton Transactions, 2019, 48, 1166-1170.	3.3	6
193	HERFD-XANES probes of electronic structures of iron^{II/III} carbene complexes. Physical Chemistry Chemical Physics, 2020, 22, 9067-9073.	2.8	6
194	Determination of Ca 2p ionization thresholds by high-resolution photoelectron spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, L289-L296.	1.5	5
195	Resonant Inelastic X-ray Scattering at the ESRF: An Evolving Portfolio for Hard and Soft X-rays. Synchrotron Radiation News, 2018, 31, 26-30.	0.8	5
196	Synergistic interplay of Zn and Rh-Cr promoters on Ga2O3 based photocatalysts for water splitting. Physical Chemistry Chemical Physics, 2018, 20, 23515-23521.	2.8	5
197	Measurement of f orbital hybridization in rare earths through electric dipole-octupole interference in x-ray absorption spectroscopy. Physical Review Materials, 2019, 3, .	2.4	5
198	Atomic/molecular layer deposition of Ni-terephthalate thin films. Dalton Transactions, 2021, 50, 16133-16138.	3.3	5

#	Article	IF	Citations
199	Hard X-Ray Photon-In-Photon-Out Spectroscopy with Lifetime Resolution â€” of XAS, XES, RIXSS and HERFD. AIP Conference Proceedings, 2007, , .	0.4	4
200	Resonant inelastic X-ray scattering on synthetic nickel compounds and Ni-Fe hydrogenase protein. Journal of Physics: Conference Series, 2009, 190, 012199.	0.4	4
201	Structure Induced Yb Valence Changes in the Solid Solution YbxCa1-xC2. Inorganic Chemistry, 2013, 52, 7020-7030.	4.0	4
202	Evidence for syngenetic micro-inclusions of As3+- and As5+-containing Cu sulfides in hydrothermal pyrite. American Mineralogist, 2019, 104, 300-306.	1.9	4
203	On the presence of covalently bound phosphorus in amorphous Niâ€“Coâ€“P and Feâ€“Coâ€“P electroplates. Materials Chemistry and Physics, 2021, 272, 124987.	4.0	4
204	Mn and Fe ions and oxo clusters in ZSM-5: pushing the limits of X-ray spectroscopy. Studies in Surface Science and Catalysis, 2007, , 796-799.	1.5	3
205	High-Throughput Structure/Function Screening of Materials and Catalysts with Multiple Spectroscopic Techniques. AIP Conference Proceedings, 2007, , .	0.4	3
206	X-ray magnetic circular dichroism measured at the FeK-edge with a reduced intrinsic broadening: x-ray absorption spectroscopy versus resonant inelastic x-ray scattering measurements. Journal of Physics Condensed Matter, 2016, 28, 505202.	1.8	3
207	Refined Model of the Oxidation States and Structures of the Mn/Ca/Cl Cluster of the Oxygen Evolving Complex of Photosystem II. , 1998, , 1273-1278.		3
208	More than protection: the function of TiO₂ interlayers in hematite functionalized Si photoanodes. Physical Chemistry Chemical Physics, 2020, 22, 28459-28467.	2.8	3
209	Energy and Environmental Science at ESRF. Synchrotron Radiation News, 2020, 33, 40-51.	0.8	3
210	Chemical Information in the L₃ X-ray Absorption Spectra of Molybdenum Compounds by High-Energy-Resolution Detection and Density Functional Theory. Inorganic Chemistry, 2022, 61, 869-881.	4.0	3
211	High-resolution X-ray imaging based on curved Bragg mirrors: first results. IEEE Transactions on Nuclear Science, 2003, 50, 140-145.	2.0	2
212	In situ X-Ray Absorption of Co/Mn/TiO2 Catalysts for Fischerâ€"Tropsch Synthesis.. ChemInform, 2004, 35, no.	0.0	2
213	Continuous Flow Cryostat for X-Ray Fluorescence. , 2010, , .		2
214	Local surrounding of vanadium atoms in CuCr1 âˆ' x V x S2: X-ray absorption spectroscopy analysis. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 114, 397-400.	0.6	2
215	Real Space Green's Function Approach to Resonant Inelastic X-Ray Scattering and HERFD XAS. Journal of Physics: Conference Series, 2013, 430, 012003.	0.4	2
216	Crystal-field excitations in NiO under high pressure studied by resonant inelastic x-ray scattering. Journal of Physics Condensed Matter, 2014, 26, 135501.	1.8	2

#	Article	IF	Citations
217	Incorporation of Mn in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Al</mml:mi><mml:mi>x</mml:mi></mml:ms mathvariant="normal">N</mml:mi></mml:mrow></mml:math>probed by x-ray absorption and emission spectroscopy, high-resolution microscopy, x-ray diffraction, and first-principles calculations. Physical Review B, 2015, 92, .	3.2	2
218	XAFS17 Highlights XAS and Related Techniques. Synchrotron Radiation News, 2019, 32, 15-17.	0.8	2
219	Spin-Sensitive and Angular Dependent Detection of Resonant Excitations at the K Absorption Pre-Edge of Î±-Fe2O3. AIP Conference Proceedings, 2007, , .	0.4	1
220	The determination of Ti₂O₃in titania slags: a comparison of different methods of analysis. Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy, 2008, 117, 166-170.	0.6	1
221	Mechanical aspects of the ID26 emission spectrometer II: improving stability for a large instrument by the use of multiple air pad supports. Diamond Light Source Proceedings, 2010, 1, .	0.1	1
222	High-resolution x-ray imaging using Rowland-circle Bragg optics. , 0, , .		0
223	Polarized Range-Extended X-Ray Absorption Spectroscopy of Oriented Photosystem II Membranes in the S1 State. AIP Conference Proceedings, 2007, , .	0.4	0
224	Electronic Structure of the Mn4Ca Cluster in the Oxygen-Evolving Complex of Photosystem II Studied by Resonant Inelastic X-Ray Scattering. AIP Conference Proceedings, 2007, , .	0.4	0
225	Application of In-Situ High Energy-Resolution Fluorescence Detection and Time-Resolved X-Ray Spectroscopy: Catalytic Activation of Oxygen over Supported Gold Catalysts. AIP Conference Proceedings, 2007, , .	0.4	0
226	Valence-to-Core X-Ray Emission Spectroscopy as a Tool for Investigation of Organometallic Systems. AIP Conference Proceedings, 2007, , .	0.4	0
227	Fifteenth International Conference on X-ray Absorption Fine Structure. Synchrotron Radiation News, 2012, 25, 3-3.	0.8	0
228	Frontispiece: Mercury(II) Binding to Metallothionein in Mytilus edulis revealed by High Energy-Resolution XANES Spectroscopy. Chemistry - A European Journal, 2019, 25, .	3.3	0
229	X-ray Dichroisms in Spherical Tensor and Greenâ€™s Function Formalism. Springer Proceedings in Physics, 2021, , 83-130.	0.2	0
230	Structure of the Photosynthetic Mn4Ca Cluster Using X-ray Spectroscopy. , 2008, , 533-538.		0
231	Electronic Structure and Oxidation State Changes in the Mn4Ca Cluster of Photosystem II. , 2008, , 529-532.		0