

Frank M F De Groot

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343
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L-index

#	Paper	IF	Citations
324	Oxygen 1s x-ray-absorption edges of transition-metal oxides. <i>Physical Review B</i> , 1989 , 40, 5715-5723	3.3	961
323	In situ XPS analysis of various iron oxide films grown by NO ₂ -assisted molecular-beam epitaxy. <i>Physical Review B</i> , 1999 , 59, 3195-3202	3.3	913
322	2p x-ray absorption of 3d transition-metal compounds: An atomic multiplet description including the crystal field. <i>Physical Review B</i> , 1990 , 42, 5459-5468	3.3	779
321	Core Level Spectroscopy of Solids		695
320	High-resolution X-ray emission and X-ray absorption spectroscopy. <i>Chemical Reviews</i> , 2001 , 101, 1779-8088	8.1	614
319	Controlled-valence properties of La _{1-x} Sr _x FeO ₃ and La _{1-x} Sr _x MnO ₃ studied by soft-x-ray absorption spectroscopy. <i>Physical Review B</i> , 1992 , 46, 4511-4519	3.3	564
318	Multiplet effects in X-ray spectroscopy. <i>Coordination Chemistry Reviews</i> , 2005 , 249, 31-63	23.2	550
317	L _{2,3} x-ray-absorption edges of d0 compounds: K ⁺ , Ca ²⁺ , Sc ³⁺ , and Ti ⁴⁺ in Oh (octahedral) symmetry. <i>Physical Review B</i> , 1990 , 41, 928-937	3.3	529
316	Electronic structure of CoO, Li-doped CoO, and LiCoO ₂ . <i>Physical Review B</i> , 1991 , 44, 6090-6103	3.3	515
315	The CTM4XAS program for EELS and XAS spectral shape analysis of transition metal L edges. <i>Micron</i> , 2010 , 41, 687-94	2.3	507
314	Nanoscale chemical imaging of a working catalyst by scanning transmission X-ray microscopy. <i>Nature</i> , 2008 , 456, 222-5	50.4	319
313	Single platinum atoms embedded in nanoporous cobalt selenide as electrocatalyst for accelerating hydrogen evolution reaction. <i>Nature Communications</i> , 2019 , 10, 1743	17.4	260
312	Evolution of the spectral function in Mott-Hubbard systems with d1 configuration. <i>Physical Review Letters</i> , 1992 , 69, 1796-1799	7.4	249
311	Oxygen 1s x-ray absorption of tetravalent titanium oxides: A comparison with single-particle calculations. <i>Physical Review B</i> , 1993 , 48, 2074-2080	3.3	243
310	Supramolecular control of the magnetic anisotropy in two-dimensional high-spin Fe arrays at a metal interface. <i>Nature Materials</i> , 2009 , 8, 189-93	27	242
309	Probing the 3d spin momentum with X-ray emission spectroscopy: the case of molecular-spin transitions. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 11647-53	3.4	231
308	Studies of copper valence states with Cu L ₃ x-ray-absorption spectroscopy. <i>Physical Review B</i> , 1989 , 39, 1541-1545	3.3	228

307	Orbital-specific mapping of the ligand exchange dynamics of Fe(CO) ₅ in solution. <i>Nature</i> , 2015 , 520, 78-81	6.4	211
306	Effects of manganese oxide promoter on the CO and H ₂ adsorption properties of titania-supported cobalt Fischer-Tropsch catalysts. <i>Journal of Catalysis</i> , 2007 , 246, 91-99	7.3	198
305	The 1s x-ray absorption pre-edge structures in transition metal oxides. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 104207	1.8	184
304	High-resolution manganese x-ray fluorescence spectroscopy. Oxidation-state and spin-state sensitivity. <i>Journal of the American Chemical Society</i> , 1994 , 116, 2914-2920	16.4	182
303	Ligand field strengths and oxidation states from manganese L-edge spectroscopy. <i>Journal of the American Chemical Society</i> , 1991 , 113, 7937-7940	16.4	180
302	L-edge X-ray absorption spectroscopy of non-heme iron sites: experimental determination of differential orbital covalency. <i>Journal of the American Chemical Society</i> , 2003 , 125, 12894-906	16.4	173
301	X-ray absorption study of the O 2p hole concentration dependence on O stoichiometry in YBa ₂ Cu ₃ O _x . <i>Physical Review B</i> , 1988 , 38, 6483-6489	3.3	172
300	Fe L-edge XAS studies of K ₄ [Fe(CN) ₆] and K ₃ [Fe(CN) ₆]: a direct probe of back-bonding. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10442-51	16.4	168
299	Calculations of magnetic x-ray dichroism in the 3d absorption spectra of rare-earth compounds. <i>Physical Review B</i> , 1988 , 37, 2086-2093	3.3	161
298	Femtosecond Soft X-ray Spectroscopy of Solvated Transition-Metal Complexes: Deciphering the Interplay of Electronic and Structural Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 880-4	6.4	159
297	Doping-induced changes in the electronic structure of La _x Sr _{1-x} TiO ₃ : Limitation of the one-electron rigid-band model and the Hubbard model. <i>Physical Review B</i> , 1992 , 46, 9841-9844	3.3	158
296	The electronic structure of Mn in oxides, coordination complexes, and the oxygen-evolving complex of photosystem II studied by resonant inelastic X-ray scattering. <i>Journal of the American Chemical Society</i> , 2004 , 126, 9946-59	16.4	157
295	Probing depth of soft x-ray absorption spectroscopy measured in total-electron-yield mode. <i>Surface and Interface Analysis</i> , 1992 , 18, 65-69	1.5	157
294	Spin and orbital occupation and phase transitions in V ₂ O ₃ . <i>Physical Review B</i> , 2000 , 61, 11506-11509	3.3	156
293	Electronic and molecular structure of photoexcited [Ru(II)(bpy) ₃] ²⁺ probed by picosecond X-ray absorption spectroscopy. <i>Journal of the American Chemical Society</i> , 2006 , 128, 5001-9	16.4	152
292	Soft-x-ray-absorption studies of the location of extra charges induced by substitution in controlled-valence materials. <i>Physical Review B</i> , 1991 , 44, 5419-5422	3.3	152
291	X-ray Absorption Near-Edge Structure (XANES) Spectroscopy. <i>Reviews in Mineralogy and Geochemistry</i> , 2014 , 78, 75-138	7.1	150
290	Resonant X-Ray Raman Spectra of Cu dd Excitations in Sr ₂ CuO ₂ Cl ₂ . <i>Physical Review Letters</i> , 1998 , 80, 5204-5207	7.4	150

289	Identification of CO adsorption sites in supported Pt catalysts using high-energy-resolution fluorescence detection X-ray spectroscopy. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 16162-4	3.4	146
288	In Situ X-ray Absorption of Co/Mn/TiO ₂ Catalysts for Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 16201-16207	3.4	144
287	Accuracy of the spin sum rule in XMCD for the transition-metal L edges from manganese to copper. <i>Physical Review B</i> , 2009 , 80,	3.3	143
286	Ab Initio Calculations of X-ray Spectra: Atomic Multiplet and Molecular Orbital Effects in a Multiconfigurational SCF Approach to the L-Edge Spectra of Transition Metal Complexes. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3565-70	6.4	139
285	Evolution of Fe species during the synthesis of over-exchanged Fe/ZSM5 obtained by chemical vapor deposition of FeCl ₃ . <i>Journal of Catalysis</i> , 2003 , 213, 251-271	7.3	136
284	Mn promotion effects in Co/TiO Fischer-Tropsch catalysts as investigated by XPS and STEM-EELS. <i>Journal of Catalysis</i> , 2005 , 230, 301-308	7.3	136
283	Soft-x-ray-absorption studies of the electronic-structure changes through the VO ₂ phase transition. <i>Physical Review B</i> , 1991 , 43, 7263-7266	3.3	135
282	2p X-ray absorption of titanium in minerals. <i>Physics and Chemistry of Minerals</i> , 1992 , 19, 140-147	1.6	128
281	In situ X-ray absorption spectroscopy of transition metal based water oxidation catalysts. <i>Chemical Society Reviews</i> , 2017 , 46, 102-125	58.5	124
280	Mixed-valence behavior and strong correlation effects of metal phthalocyanines adsorbed on metals. <i>Physical Review B</i> , 2011 , 83,	3.3	124
279	Photo-induced spin-state conversion in solvated transition metal complexes probed via time-resolved soft X-ray spectroscopy. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6809-16	16.4	122
278	Phase transformation and lithiation effect on electronic structure of Li(x)FePO ₄ : an in-depth study by soft X-ray and simulations. <i>Journal of the American Chemical Society</i> , 2012 , 134, 13708-15	16.4	121
277	Fe L-edge X-ray absorption spectroscopy of low-spin heme relative to non-heme Fe complexes: delocalization of Fe d-electrons into the porphyrin ligand. <i>Journal of the American Chemical Society</i> , 2007 , 129, 113-25	16.4	121
276	Differences between L3 and L2 x-ray absorption spectra of transition metal compounds. <i>Journal of Chemical Physics</i> , 1994 , 101, 6570-6576	3.9	119
275	Oxygen 1s and cobalt 2p X-ray absorption of cobalt oxides. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, 2277-2288	1.8	118
274	Identifying Electrocatalytic Sites of the Nanoporous Copper-Ruthenium Alloy for Hydrogen Evolution Reaction in Alkaline Electrolyte. <i>ACS Energy Letters</i> , 2020 , 5, 192-199	20.1	115
273	Pressure-induced magnetic switching and linkage isomerism in K _{0.4} Fe ₄ [Cr(CN) ₆] _{2.8} × 16 H ₂ O: X-ray absorption and magnetic circular dichroism studies. <i>Journal of the American Chemical Society</i> , 2008 , 130, 15519-32	16.4	113
272	Electric in-plane polarization in multiferroic CoFe ₂ /BaTiO ₃ nanocomposite tuned by magnetic fields. <i>Nature Communications</i> , 2013 , 4, 2051	17.4	112

271	Oxygen K-edge X-ray Absorption Spectra. <i>Chemical Reviews</i> , 2020 , 120, 4056-4110	68.1	109
270	In-situ scanning transmission X-ray microscopy of catalytic solids and related nanomaterials. <i>ChemPhysChem</i> , 2010 , 11, 951-62	3.2	109
269	Fluorescence yield detection: Why it does not measure the X-ray absorption cross section. <i>Solid State Communications</i> , 1994 , 92, 991-995	1.6	108
268	Dynamic active-site generation of atomic iridium stabilized on nanoporous metal phosphides for water oxidation. <i>Nature Communications</i> , 2020 , 11, 2701	17.4	105
267	Soft X-ray absorption spectroscopy of vanadium oxides. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1993 , 62, 185-195	1.7	102
266	1s2p resonant inelastic X-ray scattering of iron oxides. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20751-54	3.4	96
265	X-ray absorption spectroscopy of Mn/Co/TiO ₂ Fischer-Tropsch catalysts: relationships between preparation method, molecular structure, and catalyst performance. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 8626-39	3.4	96
264	Spectral sharpening of the Pt L edges by high-resolution x-ray emission. <i>Physical Review B</i> , 2002 , 66, 115107	3.3	96
263	Multiplet calculations of L(2,3) x-ray absorption near-edge structures for 3d transition-metal compounds. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 104208	1.8	94
262	Femtosecond M _{2,3} -Edge Spectroscopy of Transition-Metal Oxides: Photoinduced Oxidation State Change in Fe ₂ O ₃ . <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 3667-3671	6.4	89
261	3D nanoporous iridium-based alloy microwires for efficient oxygen evolution in acidic media. <i>Nano Energy</i> , 2019 , 59, 146-153	17.1	88
260	The iron L edges: Fe 2p X-ray absorption and electron energy loss spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013 , 187, 32-48	1.7	87
259	The role of Cu on the reduction behavior and surface properties of Fe-based Fischer-Tropsch catalysts. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 667-80	3.6	85
258	Hard X-ray nanotomography of catalytic solids at work. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 11986-90	16.4	84
257	Site-selective EXAFS in mixed-valence compounds using high-resolution fluorescence detection: a study of iron in Prussian Blue. <i>Inorganic Chemistry</i> , 2002 , 41, 3121-7	5.1	84
256	Unoccupied electronic states of CuO: An oxygen 1s x-ray-absorption spectroscopy investigation. <i>Physical Review B</i> , 1989 , 39, 4886-4890	3.3	84
255	Spin-polarized x-ray emission of 3d transition-metal ions: A comparison via K β and K β' detection. <i>Physical Review B</i> , 1997 , 56, 4553-4564	3.3	83
254	Fine structure of the Ca 2p x-ray-absorption edge for bulk compounds, surfaces, and interfaces. <i>Physical Review B</i> , 1991 , 43, 6899-6907	3.3	82

253	In situ synchrotron-based IR microspectroscopy to study catalytic reactions in zeolite crystals. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 3543-7	16.4	81
252	Angular dependence of core hole screening in LiCoO ₂ : A DFT+U calculation of the oxygen and cobalt K-edge x-ray absorption spectra. <i>Physical Review B</i> , 2010 , 81,	3.3	78
251	Electronic Structure of Cobalt Nanocrystals Suspended in Liquid. <i>Nano Letters</i> , 2007 , 7, 1919-1922	11.5	74
250	K β Detected XANES of Framework-Substituted FeZSM-5 Zeolites. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 10002-10011	3.4	73
249	The Structure of Carbon Encapsulated NiFe Nanoparticles. <i>Journal of Catalysis</i> , 2001 , 204, 169-174	7.3	73
248	Multiplet effects in the Ru L _{2,3} x-ray-absorption spectra of Ru(IV) and Ru(V) compounds. <i>Physical Review B</i> , 2000 , 61, 5262-5266	3.3	72
247	Synchrotron radiation effects on catalytic systems as probed with a combined in-situ UV-vis/XAFS spectroscopic setup. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 4042-7	3.4	71
246	Spin-Resolved Photoemission on Anti-Ferromagnets: Direct Observation of Zhang-Rice Singlets in CuO. <i>Physical Review Letters</i> , 1997 , 78, 1126-1129	7.4	70
245	On the surface chemistry of iron oxides in reactive gas atmospheres. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 1584-8	16.4	69
244	Interface properties of magnetic tunnel junction La _{0.7} Sr _{0.3} MnO ₃ /SrTiO ₃ superlattices studied by standing-wave excited photoemission spectroscopy. <i>Physical Review B</i> , 2010 , 82,	3.3	69
243	H ₂ adsorption on 3d transition metal clusters: a combined infrared spectroscopy and density functional study. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 1139-49	2.8	68
242	Valence state of Mn in Ca-doped LaMnO ₃ studied by high-resolution Mn K α emission spectroscopy. <i>Physical Review B</i> , 1999 , 60, 4665-4674	3.3	68
241	Fabrication of Fe_{16}N_2 Films by Sputtering Process and Experimental Investigation of Origin of Giant Saturation Magnetization in Fe_{16}N_2 . <i>IEEE Transactions on Magnetics</i> , 2012 , 48, 1710-1717	2	67
240	Spin-orbit-induced mixed-spin ground state in RNiO ₃ perovskites probed by x-ray absorption spectroscopy: Insight into the metal-to-insulator transition. <i>Physical Review B</i> , 2005 , 71,	3.3	67
239	The structure of vanadium oxide species on γ -alumina; an in situ X-ray absorption study during catalytic oxidation. <i>Topics in Catalysis</i> , 2000 , 10, 241-254	2.3	66
238	Local spin-flip spectral distribution obtained by resonant x-ray Raman scattering. <i>Physical Review B</i> , 1998 , 57, 14584-14587	3.3	65
237	Strain-Engineered Oxygen Vacancies in CaMnO Thin Films. <i>Nano Letters</i> , 2017 , 17, 794-799	11.5	64
236	Nanoscale chemical imaging of the reduction behavior of a single catalyst particle. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3632-6	16.4	64

235	Electronic structure and the metal-semiconductor transition in BaPb _{1-x} Bi _x O ₃ studied by photoemission and x-ray-absorption spectroscopy. <i>Physical Review B</i> , 1993 , 48, 16917-16925	3.3	62
234	Rational strain engineering of single-atom ruthenium on nanoporous MoS for highly efficient hydrogen evolution. <i>Nature Communications</i> , 2021 , 12, 1687	17.4	62
233	X-ray nanoscopy of cobalt Fischer-Tropsch catalysts at work. <i>Chemical Communications</i> , 2013 , 49, 4622-45.8		60
232	Soft X-ray magnetic circular dichroism study of the colossal magnetoresistance compound La _{1-x} Sr _x MnO ₃ . <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1997 , 86, 115-118	1.7	60
231	Imaging and quantifying the morphology of an organic-inorganic nanoparticle at the sub-nanometre level. <i>Nature Nanotechnology</i> , 2010 , 5, 538-44	28.7	57
230	On the electronic structure of Cu(III) and Ni(III) in La ₂ Li _{1/2} Cu _{1/2} O ₄ , Nd ₂ Li _{1/2} Ni _{1/2} O ₄ , and Cs ₂ KCuF ₆ . <i>Chemical Physics</i> , 1998 , 232, 63-74	2.3	57
229	Electronic structure of LaFeAsO _{1-x} F _x from x-ray absorption spectroscopy. <i>Physical Review B</i> , 2008 , 78,	3.3	57
228	Reactivity of Fe-binuclear complexes in over-exchanged Fe/ZSM5, studied by in situ XAFS spectroscopy Part 1: Heat treatment in He and O ₂ . <i>Journal of Catalysis</i> , 2003 , 215, 279-293	7.3	57
227	1s2p resonant inelastic x-ray scattering in Be ₂ O ₃ . <i>Physical Review B</i> , 1998 , 58, 13452-13458	3.3	57
226	L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 3641-3647	6.4	55
225	Dissecting Local Atomic and Intermolecular Interactions of Transition-Metal Ions in Solution with Selective X-ray Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3448-53	6.4	55
224	Combined EXAFS and STEM-EELS study of the electronic state and location of Mn as promoter in Co-based Fischer-Tropsch catalysts. <i>Physical Chemistry Chemical Physics</i> , 2005 , 7, 568-72	3.6	55
223	Phase segregation in cerium-lanthanum solid solutions. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 9984-90	3.4	54
222	Probing the influence of X-rays on aqueous copper solutions using time-resolved in situ combined video/X-ray absorption near-edge/ultraviolet-visible spectroscopy. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 17671-7	3.4	54
221	X-ray imaging of zeolite particles at the nanoscale: influence of steaming on the state of aluminum and the methanol-to-olefin reaction. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 3616-9	16.4	53
220	A Highly Active and Selective Manganese Oxide Promoted Cobalt-on-Silica Fischer-Tropsch Catalyst. <i>Topics in Catalysis</i> , 2011 , 54, 768-777	2.3	53
219	Genesis of Co/SiO ₂ Catalysts: XAS Study at the Cobalt LIII,II Absorption Edges. <i>Journal of Catalysis</i> , 2000 , 189, 456-462	7.3	52
218	Single Au Atom Doping of Silver Nanoclusters. <i>ACS Nano</i> , 2018 , 12, 12751-12760	16.7	48

217	Interplay between nanoscale reactivity and bulk performance of H-ZSM-5 catalysts during the methanol-to-hydrocarbons reaction. <i>Journal of Catalysis</i> , 2013 , 307, 185-193	7.3	47
216	LambdaO4 upside down: a new molecular structure for supported VO4 catalysts. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10223-33	3.4	47
215	Ligand-field symmetry effects in Fe(II) polypyridyl compounds probed by transient X-ray absorption spectroscopy. <i>Faraday Discussions</i> , 2012 , 157, 463-74; discussion 475-500	3.6	46
214	Differences between L3 and L2 X-ray absorption spectra. <i>Physica B: Condensed Matter</i> , 1995 , 208-209, 15-18	2.8	46
213	Influence of the core hole on K β emission following photoionization or orbital electron capture: A comparison using MnO and 55Fe2O3. <i>Physical Review B</i> , 2001 , 64,	3.3	45
212	Local Electronic and Magnetic Structure of Ni below and above TC: A Spin-Resolved Circularly Polarized Resonant Photoemission Study. <i>Physical Review Letters</i> , 1997 , 79, 3510-3513	7.4	44
211	Metal-to-ligand and ligand-to-metal charge transfer in thin films of Prussian blue analogues investigated by X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 5882-9	3.6	44
210	Range-extended EXAFS at the L edge of rare earths using high-energy-resolution fluorescence detection: A study of La in LaOCl. <i>Physical Review B</i> , 2005 , 72,	3.3	44
209	Local-spin-selective x-ray absorption and x-ray magnetic circular dichroism of MnP. <i>Physical Review B</i> , 1995 , 51, 1045-1052	3.3	44
208	Identification of the dominant photochemical pathways and mechanistic insights to the ultrafast ligand exchange of Fe(CO)5 to Fe(CO)4EtOH. <i>Structural Dynamics</i> , 2016 , 3, 043204	3.2	42
207	Electronic Structure of CoO Nanocrystals and a Single Crystal Probed by Resonant X-ray Emission Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 15218-15230	3.8	42
206	Valence electron distribution in La2Li1/2Cu1/2O4, Nd2Li1/2Ni1/2O4, and La2Li1/2Co1/2O4. <i>Chemical Physics Letters</i> , 1998 , 297, 321-328	2.5	41
205	X-ray absorption of transition metal oxides: An overview of the theoretical approaches. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1993 , 62, 111-130	1.7	41
204	Intrinsic deviations in fluorescence yield detected x-ray absorption spectroscopy: the case of the transition metal L β edges. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 452201	1.8	40
203	Direct contact versus solvent-shared ion pairs in NiCl2 electrolytes monitored by multiplet effects at Ni(II) L edge X-ray absorption. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 4440-5	3.4	40
202	2p3s3p, 2p3p3p, and 2p3s3s resonant Auger spectroscopy from NiO. <i>Physical Review B</i> , 1999 , 59, 9933-9942	3.4	40
201	Star-shaped molecule of MnII4O6 core with an S \uparrow =10 high-spin state. A theoretical and experimental study with XPS, XMCD, and other magnetic methods. <i>Inorganic Chemistry</i> , 2008 , 47, 4605-17 ¹	5.1	38
200	Hydrogen-induced transition from dissociative to molecular chemisorption of CO on vanadium clusters. <i>Journal of the American Chemical Society</i> , 2007 , 129, 2516-20	16.4	38

- 199 Covalency in oxygen chemisorption as probed by x-ray absorption. *Physical Review B*, **1989**, 40, 7924-7927. 3.3 38
- 198 Jahn-Teller distortion driven magnetic polarons in magnetite. *Nature Communications*, **2017**, 8, 15929 17.4 37
- 197 In-Situ Soft X-ray Absorption of Over-exchanged Fe/ZSM5. *Journal of Physical Chemistry B*, **2003**, 107, 13069-13075 3.4 37
- 196 Proof for trivalent Sc ions in Sc₂@C₈₄ from high-energy spectroscopy. *Physical Review B*, **2000**, 62, 13196-13203. 3.3 37
- 195 Co Polyoxometalates and a Co₃O₄ Thin Film Investigated by L-Edge X-ray Absorption Spectroscopy. *Journal of Physical Chemistry C*, **2015**, 119, 4173-4179 3.8 36
- 194 Phase transition in LiVO₂ studied by near-edge x-ray-absorption spectroscopy. *Physical Review B*, **1997**, 55, 15500-15505 3.3 36
- 193 Charge transfer at very high pressure in NiO. *Physical Review B*, **2003**, 67, 110101-110104 3.3 36
- 192 New frontiers in X-ray spectroscopy in heterogeneous catalysis: Using Fe/ZSM-5 as test-system. *Catalysis Today*, **2005**, 110, 228-238 5.3 36
- 191 Direct evidence of the role of hybridization in the x-ray magnetic circular dichroism of alpha-Ce. *Physical Review Letters*, **1995**, 75, 4654-4657 7.4 36
- 190 Active phase distribution changes within a catalyst particle during Fischer-Tropsch synthesis as revealed by multi-scale microscopy. *Catalysis Science and Technology*, **2016**, 6, 4438-4449 5.5 34
- 189 Oxygen Binding to Cobalt and Iron Phthalocyanines As Determined from in Situ X-ray Absorption Spectroscopy. *Journal of Physical Chemistry C*, **2011**, 115, 25422-25428 3.8 34
- 188 Strong K-edge magnetic circular dichroism observed in photon-in-photon-out spectroscopy. *Physical Review Letters*, **2010**, 105, 037202 7.4 34
- 187 The interpretation of sulfur K-edge XANES spectra: a case study on thiophenic and aliphatic sulfur compounds. *Journal of Physical Chemistry A*, **2009**, 113, 2750-6 2.8 34
- 186 Chemical analysis of passivated and oxidized layers on FeCr and FeTi alloys by soft x-ray absorption spectroscopy. *Surface and Interface Analysis*, **1993**, 20, 21-26 1.5 34
- 185 Unusual coordination behavior of Cr³⁺ in microporous aluminophosphates. *Journal of Physical Chemistry B*, **2006**, 110, 716-22 3.4 33
- 184 Characterisation, degradation and regeneration of luminescent Ag clusters in solution. *Nanoscale*, **2016**, 8, 19901-19909 7.7 32
- 183 Electron delocalization in cyanide-bridged coordination polymer electrodes for Li-ion batteries studied by soft x-ray absorption spectroscopy. *Physical Review B*, **2011**, 84, 114407-114414 3.3 32
- 182 Charge transfer multiplet calculations of the K beta X-ray emission spectra of divalent nickel compounds. *Journal of Physics Condensed Matter*, **1994**, 6, 6875-6884 1.8 32

181	From ligand fields to molecular orbitals: probing the local valence electronic structure of Ni(2+) in aqueous solution with resonant inelastic X-ray scattering. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 16512-21	3.4	31
180	A multispectroscopic study of 3d orbitals in cobalt carboxylates: the high sensitivity of 2p3d resonant X-ray emission spectroscopy to the ligand field. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 1170-4	16.4	31
179	3D nanoscale chemical imaging of the distribution of aluminum coordination environments in zeolites with soft X-ray microscopy. <i>ChemPhysChem</i> , 2013 , 14, 496-9	3.2	31
178	The effect of charge on CO binding in rhodium carbonyls: from bridging to terminal CO. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2126-7	16.4	31
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