

# Andrew P Grosvenor

## List of Publications by Year in descending order

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85  
papers

9,963  
citations

218381

26  
h-index

58464

82  
g-index

92  
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92  
docs citations

92  
times ranked

16506  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resolving surface chemical states in XPS analysis of first row transition metals, oxides and hydroxides: Cr, Mn, Fe, Co and Ni. Applied Surface Science, 2011, 257, 2717-2730.	3.1	6,012
2	New interpretations of XPS spectra of nickel metal and oxides. Surface Science, 2006, 600, 1771-1779.	0.8	1,663
3	Examination of the Bonding in Binary Transition-Metal Monophosphides MP (M = Cr, Mn, Fe, Co) by X-Ray Photoelectron Spectroscopy. Inorganic Chemistry, 2005, 44, 8988-8998.	1.9	415
4	X-ray Photoelectron and Absorption Spectroscopy of Metal-Rich Phosphides $M_2P$ and $M_3P$ ( $M = Cr, Ni$ ). Chemistry of Materials, 2008, 20, 7081-7088.	3.2	233
5	Studies of the oxidation of iron by water vapour using X-ray photoelectron spectroscopy and QUASES <sup>®</sup> . Surface Science, 2004, 572, 217-227.	0.8	190
6	Examination of the oxidation of iron by oxygen using X-ray photoelectron spectroscopy and QUASESTM. Surface Science, 2004, 565, 151-162.	0.8	116
7	Structure and growth of oxides on polycrystalline nickel surfaces. Surface and Interface Analysis, 2007, 39, 582-592.	0.8	71
8	XPS and EELS characterization of $Mn_2SiO_4$ , $MnSiO_3$ and $MnAl_2O_4$ . Applied Surface Science, 2016, 379, 242-248.	3.1	63
9	Effects of metal substitution in transition-metal phosphides $(Ni_{1-x}M_x)_2P$ ( $M = Cr, Fe, Co$ ) studied by X-ray photoelectron and absorption spectroscopy. Journal of Materials Chemistry, 2009, 19, 6015.	6.7	61
10	Intralayer Cation Ordering in a Brownmillerite Superstructure: Synthesis, Crystal, and Magnetic Structures of $Ca_2FeCoO_5$ . Chemistry of Materials, 2010, 22, 6008-6020.	3.2	55
11	Analysis of Metal Site Preference and Electronic Structure of Brownmillerite-Phase Oxides $(A_2B_2O_5)_x$ ( $A = Ca, Sr; B = Al$ ). Journal of Materials Chemistry, 2009, 19, 11366-11372.	1.3	1,078
12	Next-nearest neighbour contributions to P 2p <sub>3/2</sub> X-ray photoelectron binding energy shifts of mixed transition-metal phosphides $M_1M_2P$ with the MnP-type structure. Journal of Solid State Chemistry, 2007, 180, 2702-2712.	1.4	49
13	X-ray photoelectron spectroscopy study of the skutterudites $LaFe_4Sb_{12}$ , $CeFe_4Sb_{12}$ , $CoSb_3$ , and $CoP_3$ . Physical Review B, 2006, 74, .	1.1	47
14	Activation energies for the oxidation of iron by oxygen gas and water vapour. Surface Science, 2005, 574, 317-321.	0.8	44
15	XANES and XPS investigations of $(TiO_x)(SiO_2)_x$ : the contribution of final-state relaxation to shifts in absorption and binding energies. Journal of Materials Chemistry, 2011, 21, 1829-1836.	6.7	44
16	A Structural Investigation of Hydrus and Anhydrous Rare-Earth Phosphates. Inorganic Chemistry, 2016, 55, 9685-9695.	1.9	37
17	X-ray Photoelectron Spectroscopy Study of Rare-Earth Filled Skutterudites $LaFe_4P_{12}$ and $CeFe_4P_{12}$ . Chemistry of Materials, 2006, 18, 1650-1657.	3.2	32
18	X-ray Spectroscopic Study of the Electronic Structure of Monazite- and Xenotime-Type Rare-Earth Phosphates. Journal of Physical Chemistry C, 2014, 118, 18000-18009.	1.5	32

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19	Coordination-Induced Shifts of Absorption and Binding Energies in the $\text{SrFe}_{1-x}\text{Zn}_x\text{O}_{3+\delta}$ System. <i>Journal of Physical Chemistry C</i> , 2010, 114, 19822-19829.	1.5	30
20	Next-nearest neighbour contributions to the XPS binding energies and XANES absorption energies of P and As in transition-metal arsenide phosphides $\text{MA}_2\text{Py}$ having the MnP-type structure. <i>Journal of Solid State Chemistry</i> , 2008, 181, 2549-2558.	1.4	29
21	Local and Average Structures and Magnetic Properties of $\text{Sr}_{2-x}\text{FeMnO}_{5+y}$ , $y = 0.0, 0.5$ . Comparisons with $\text{Ca}_2\text{FeMnO}_5$ and the Effect of the A-Site Cation. <i>Inorganic Chemistry</i> , 2011, 50, 7779-7791.	1.9	27
22	An x-ray absorption spectroscopic study of the electronic structure and bonding of rare-earth orthoferrites. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 465502.	0.7	27
23	A case for oxygen deficiency in $\text{Gd}_2\text{Ti}_2\text{Zr}_x\text{O}_7$ pyrochlore-type oxides. <i>Journal of Alloys and Compounds</i> , 2013, 565, 44-49.	2.8	27
24	Probing the effect of radiation damage on the structure of rare-earth phosphates. <i>Journal of Alloys and Compounds</i> , 2015, 653, 279-289.	2.8	27
25	Examination of $\text{CeFe}_4\text{Sb}_{12}$ upon exposure to air: Is this material appropriate for use in terrestrial, high-temperature thermoelectric devices?. <i>Journal of Alloys and Compounds</i> , 2010, 505, L6-L9.	2.8	26
26	An X-ray absorption spectroscopic study of the effect of bond covalency on the electronic structure of $\text{Gd}_2\text{Ti}_2\text{SrxO}_7$ . <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 10477.	1.3	26
27	Effects of bond character on the electronic structure of brownmillerite-phase oxides, $\text{Ca}_2\text{B}_2\text{Fe}_2\text{O}_5$ ( $\text{B} = \text{Al, Ga}$ ): an X-ray absorption and electron energy loss spectroscopic study. <i>Journal of Materials Chemistry</i> , 2009, 19, 9213.	6.7	24
28	Electronic structure of lanthanum transition-metal oxyarsenides $\text{LaMA}_2\text{O}$ ( $\text{M} = \text{Fe, Co, Ni}$ ) and $\text{LaFe}_2\text{M}_2\text{AsO}$ ( $\text{M} = \text{Co, Ni}$ ) by X-ray photoelectron and absorption spectroscopy. <i>Solid State Sciences</i> , 2010, 12, 50-58.	1.5	24
29	How temperature influences the stoichiometry of $\text{CeTi}_2\text{O}_6$ . <i>Solid State Sciences</i> , 2012, 14, 761-767.	1.5	23
30	Investigation of the Fe K-edge XANES Spectra from $\text{Fe}_{1-x}\text{Ga}_x\text{SbO}_4$ : Local versus Nonlocal Excitations. <i>Journal of Physical Chemistry A</i> , 2011, 115, 1908-1912.	1.1	22
31	XANES and XPS investigations of the local structure and final-state effects in amorphous metal silicates: $(\text{ZrO}_2)_x(\text{TiO}_2)_y(\text{SiO}_2)_{1-x-y}$ . <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 205-217.	1.3	21
32	An investigation of the Fe and Mo oxidation states in $\text{Sr}_2\text{Fe}_2\text{MoxO}_6$ ( $0.25 \leq x \leq 1.0$ ) double perovskites by X-ray absorption spectroscopy. <i>Journal of Alloys and Compounds</i> , 2012, 537, 323-331.	2.8	21
33	Ceria Nanocubes: Dependence of the Electronic Structure on Synthetic and Experimental Conditions. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10095-10105.	1.5	20
34	Synthesis, structure, and magnetic properties of novel B-site ordered double perovskites, $\text{SrLaMReO}_6$ ( $\text{M} = \text{Mg, Mn, Co and Ni}$ ). <i>Dalton Transactions</i> , 2015, 44, 10806-10816.	1.6	20
35	An X-ray absorption spectroscopic study of the metal site preference in $\text{Al}_{1-x}\text{Ga}_x\text{FeO}_3$ . <i>Journal of Solid State Chemistry</i> , 2013, 197, 147-153.	1.4	18
36	A study of the electronic structure and structural stability of $\text{Gd}_2\text{Ti}_2\text{O}_7$ based glass-ceramic composites. <i>RSC Advances</i> , 2015, 5, 80939-80949.	1.7	18

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37	Low-temperature synthesis of $\text{CaZrTi}_2\text{O}_7$ zirconolite-type materials using ceramic, coprecipitation, and sol-gel methods. <i>Journal of Materials Chemistry C</i> , 2019, 7, 177-187.	2.7	17
38	An investigation of pyrochlore-type oxides ( $\text{Yb}_2\text{Ti}_2\text{Fe}_x\text{O}_7$ ) by XANES. <i>Journal of Physics and Chemistry of Solids</i> , 2013, 74, 830-836.	1.9	16
39	Investigation of the Structural Stability of Ion-Implanted $\text{Gd}_2\text{Ti}_2\text{Sn}_x\text{O}_7$ Pyrochlore-Type Oxides by Glancing Angle X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 7910-7922.	1.5	16
40	Analysis of the electronic structure of $\text{Hf}(\text{Si}_0.5\text{As}_0.5)\text{As}$ by X-ray photoelectron and photoemission spectroscopy. <i>Journal of Solid State Chemistry</i> , 2007, 180, 2670-2681.	1.4	14
41	Electronic structure of rare-earth chromium antimonides $\text{RECrSb}_3$ (RE=La, Nd, Sm, Gd, Dy, Yb) by X-ray photoelectron spectroscopy. <i>Journal of Solid State Chemistry</i> , 2012, 196, 79-86.	1.4	13
42	Analysis of the Mo Speciation in the JEB Tailings Management Facility at McClean Lake, Saskatchewan. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4460-4467.	4.6	13
43	Investigation of $\text{CeTi}_2\text{O}_6$ - and $\text{CaZrTi}_2\text{O}_7$ -containing glass-ceramic composite materials. <i>Canadian Journal of Chemistry</i> , 2017, 95, 1110-1121.	0.6	13
44	Investigating the Geochemical Model for Molybdenum Mineralization in the JEB Tailings Management Facility at McClean Lake, Saskatchewan: An X-ray Absorption Spectroscopy Study. <i>Environmental Science &amp; Technology</i> , 2015, 49, 6504-6509.	4.6	12
45	Investigation of the stability of glass-ceramic composites containing $\text{CeTi}_2\text{O}_6$ and $\text{CaZrTi}_2\text{O}_7$ after ion implantation. <i>Solid State Sciences</i> , 2017, 74, 109-117.	1.5	12
46	An investigation of the chemical durability of hydrous and anhydrous rare-earth phosphates. <i>Journal of Nuclear Materials</i> , 2018, 509, 631-643.	1.3	12
47	Investigation of coordination changes in substituted transition-metal oxides by K-edge XANES: Beyond the pre-edge. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2011, 184, 192-195.	0.8	11
48	An investigation of the electronic structure and structural stability of $\text{RE}_2\text{Ti}_2\text{O}_7$ by glancing angle and total electron yield XANES. <i>Journal of Alloys and Compounds</i> , 2014, 616, 516-526.	2.8	11
49	X-ray microprobe characterization of corrosion at the buried polymer-steel interface. <i>Corrosion Science</i> , 2018, 144, 198-206.	3.0	10
50	Shell isolated nanoparticle enhanced Raman spectroscopy (SHINERS) studies of steel surface corrosion. <i>Journal of Electroanalytical Chemistry</i> , 2019, 853, 113559.	1.9	10
51	Bonding and Electronic Structure of Phosphides, Arsenides, and Antimonides by X-Ray Photoelectron and Absorption Spectroscopies. <i>Structure and Bonding</i> , 2009, , 41-92.	1.0	9
52	The Effect of Synthetic Method and Annealing Temperature on Metal Site Preference in $\text{AlGaFeO}_3$ . <i>Inorganic Chemistry</i> , 2013, 52, 8612-8620.	1.9	9
53	Ternary arsenides $\text{Zr}(\text{SixAs}_{1-x})\text{As}$ with $\text{PbCl}_2$ -type ( $x=0.4$ ) and $\text{PbFCl}$ -type ( $x=0.6$ ) structures. <i>Journal of Alloys and Compounds</i> , 2010, 492, 19-25.	2.8	8
54	An investigation of the thermal stability of $\text{Nd}_2\text{Y}_2\text{Zr}_2\text{O}_{22}$ inert matrix fuel materials. <i>Journal of Alloys and Compounds</i> , 2015, 635, 245-255.	2.8	8

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55	Identifying calcium-containing mineral species in the JEB Tailings Management Facility at McClean Lake, Saskatchewan. <i>Applied Geochemistry</i> , 2016, 73, 98-108.	1.4	8
56	Investigation of the Thermal Stability of Nd <sub>x</sub> Sc <sub>y</sub> Zr <sub>1-x-y</sub> O <sub>2</sub> Materials Proposed for Inert Matrix Fuel Applications. <i>Inorganic Chemistry</i> , 2016, 55, 1032-1043.	1.9	7
57	Assessing the oxidation states and structural stability of the Ce analogue of brannerite. <i>Surface and Interface Analysis</i> , 2017, 49, 1335-1344.	0.8	7
58	A one-step synthesis of rare-earth phosphate-borosilicate glass composites. <i>RSC Advances</i> , 2018, 8, 39053-39065.	1.7	7
59	A spectromicroscopy study of the corrosion of polymer coated steel. <i>Corrosion Science</i> , 2018, 145, 35-46.	3.0	7
60	On the Oxidation of EuFe <sub>4</sub> Sb <sub>12</sub> and EuRu <sub>4</sub> Sb <sub>12</sub> . <i>Inorganic Chemistry</i> , 2011, 50, 6263-6268.	1.9	6
61	Investigation of Factors That Affect the Oxidation State of Ce in the Garnet-Type Structure. <i>Inorganic Chemistry</i> , 2019, 58, 2299-2306.	1.9	6
62	Crystallization of Rare-Earth Phosphate-Borosilicate Glass Composites Synthesized by a One-Step Coprecipitation Method. <i>Crystal Growth and Design</i> , 2020, 20, 2217-2231.	1.4	6
63	Effect of Synthetic Method and Annealing Temperature on the Structure of Hollandite-Type Oxides. <i>Inorganic Chemistry</i> , 2018, 57, 14353-14361.	1.9	5
64	Bonding and Electronic Structure of Phosphides, Arsenides, and Antimonides by X-Ray Photoelectron and Absorption Spectroscopies. <i>Structure and Bonding</i> , 2009, , 41-92.	1.0	5
65	ARXPS study of the ion mobility through (HfO <sub>2</sub> ) <sub>x</sub> (SiO <sub>2</sub> ) <sub>1-x</sub> formed on air-exposed HfSi <sub>0.5</sub> As <sub>1.5</sub> . <i>Surface and Interface Analysis</i> , 2008, 40, 490-494.	0.8	4
66	Determining the effect of Ru substitution on the thermal stability of CeFe <sub>4</sub> xRu <sub>x</sub> Sb <sub>12</sub> . <i>Solid State Sciences</i> , 2011, 13, 2041-2048.	1.5	4
67	A spectromicroscopy study of the corrosion of fusion-bonded epoxy-coated rebar. <i>Surface and Interface Analysis</i> , 2019, 51, 525-530.	0.8	4
68	Quenching of Long Range Order and the Mn <sup>3+</sup> Ordered Moment in the Layered Antiferromagnet, Ba <sub>x</sub> Sr <sub>1-x</sub> LaMnO <sub>4</sub> . A Polarized Neutron Scattering Study. <i>Inorganic Chemistry</i> , 2019, 58, 4300-4309.	1.9	4
69	Investigating the local structure of B-site cations in (1-x)BaTiO <sub>3</sub> xBiScO <sub>3</sub> and (1-x)PbTiO <sub>3</sub> xBiScO <sub>3</sub> using X-ray absorption spectroscopy. <i>Solid State Sciences</i> , 2018, 79, 6-14.	1.5	3
70	Examination of the site preference in garnet type (X <sub>3</sub> A <sub>2</sub> B <sub>3</sub> O <sub>12</sub> ; X=Y, A/B= Al, Ga, Fe) materials. <i>Solid State Sciences</i> , 2018, 83, 56-64.	1.5	3
71	An X-ray spectromicroscopy study of the calcium mineralization in the JEB tailings management facility at McClean Lake, Saskatchewan. <i>Applied Geochemistry</i> , 2020, 112, 104459.	1.4	3
72	Examination of the site preference of metals in NiAl <sub>2</sub> GaO spinel-type oxides by X-ray absorption near-edge spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2014, 195, 139-144.	0.8	2

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73	Soft X-ray spectromicroscopy studies of pitting corrosion of reinforcing steel bar. Surface and Interface Analysis, 2019, 51, 681-691.	0.8	2
74	Structural and magnetic properties of churchite-type REPO <sub>4</sub> ·2H <sub>2</sub> O materials. Journal of Solid State Chemistry, 2022, 312, 123261.	1.4	2
75	Examination of the Bonding in Binary Transition-Metal Monophosphides MP (M: Cr, Mn, Fe, Co) by X-Ray Photoelectron Spectroscopy.. ChemInform, 2006, 37, no.	0.1	1
76	An investigation of the electronic structure of Cu <sub>2</sub> FeSn <sub>3</sub> À <sup>3</sup> Ti S <sub>8</sub> (O <sub>3</sub> ) thiospinel spin-crossover materials by X-ray absorption spectroscopy and electronic structure calculations. Journal of Solid State Chemistry, 2013, 197, 532-542.	1.4	1
77	Investigation of Nd <sub>x</sub> Y <sub>0.25</sub> À <sup>x</sup> Zr <sub>0.75</sub> O <sub>1.88</sub> inert matrix fuel materials made by a co-precipitation synthetic route. Canadian Journal of Chemistry, 2016, 94, 198-210.	0.6	1
78	The Influence of Final-State Effects on XPS Spectra from First-Row Transition-Metals. Springer Series in Surface Sciences, 2016, , 217-262.	0.3	1
79	Effect of glass composition on the crystallization of CePO <sub>4</sub> À <sup>borosilicate</sup> glass composite materials. Canadian Journal of Chemistry, 2020, 98, 701-707.	0.6	1
80	Family of anisotropic spin glasses Ba <sub>1</sub> À <sup>x</sup> La <sub>1+x</sub> MnO <sub>4</sub> À <sup>1</sup> . Physical Review Materials, 2021, 5, .	0.9	1
81	Mixed valence cerium substitution in Gd <sub>2-x</sub> Ce <sub>x</sub> Ti <sub>2</sub> O <sub>7</sub> À <sup>1</sup> pyrochlores. Journal of Electron Spectroscopy and Related Phenomena, 2019, 234, 5-12.	0.8	0
82	Analysis of low concentration U species within U mill tailings using X-ray microprobe. Journal of Electron Spectroscopy and Related Phenomena, 2020, 244, 146992.	0.8	0
83	Understanding the Interplay of Vacancy, Cation, and Charge Ordering in the Tunable Sc <sub>2</sub> VO <sub>5</sub> À <sup>1</sup> Defect Fluorite System. Inorganic Chemistry, 2021, 60, 872-882.	1.9	0
84	Magnetism in Mixed Valence, Defect, Cubic Perovskites: Ba <sub>1-x</sub> Fe <sub>x</sub> O <sub>2.5</sub> À <sup>1</sup> , <i>x</i> = 0.25, 0.50, and 0.75. Local and Average Structures. ACS Omega, 2021, 6, 6017-6029.	1.6	0
85	A Study of the Corrosion of Polymethyl Methacrylate Coated Rebar Using Glancing Angle X-Ray Absorption Near Edge Spectroscopy. Corrosion, 2021, 77, 1291-1298.	0.5	0