# Peter M A Sherwood

## List of Publications by Year in Descending Order



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| 110 papers | 4,712 citations | 37 h-index | 66 g-index |
| 120 ext. papers | 5,146 ext. citations | 3.4 avg, IF | 5.53 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 110 | Practical guide for curve fitting in x-ray photoelectron spectroscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 061203 | 2.9 | 86 |
| 109 | Introductory guide to backgrounds in XPS spectra and their impact on determining peak intensities. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 063203 | 2.9 | 24 |
| 108 | The use and misuse of curve fitting in the analysis of core X-ray photoelectron spectroscopic data. *Surface and Interface Analysis*, **2019**, 51, 589-610 | 1.5 | 33 |
| 107 | Practical Guides for X-Ray Photoelectron Spectroscopy (XPS): First Steps in planning, conducting and reporting XPS measurements. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, | 2.9 | 80 |
| 106 | Rapid evaluation of the Voigt function and its use for interpreting X-ray photoelectron spectroscopic data. *Surface and Interface Analysis*, **2019**, 51, 254-274 | 1.5 | 14 |
| 105 | Photoelectron spectroscopic studies of the formation of hydroxyapatite films on titanium pretreated with etidronic acid. *Surface and Interface Analysis*, **2013**, 45, 742-750 | 1.5 | 7 |
| 104 | Photoelectron spectroscopic studies of the formation of hydroxyapatite films on 316L stainless steel pretreated with etidronic acid. *Surface and Interface Analysis*, **2012**, 44, 1587-1600 | 1.5 | 5 |
| 103 | Photoelectron spectroscopic studies of the interfacial reaction between glass and commercial adhesive. *Surface and Interface Analysis*, **2009**, 41, 463-470 | 1.5 | 8 |
| 102 | Nanostructured Composites **2008**, 2986-2995 | | |
| 101 | X-ray Photoelectron Spectroscopic Study of the Surface State during Ethane Oxidative Dehydrogenation at Millisecond Contact Times. *Journal of Physical Chemistry C*, **2007**, 111, 18724-18730 | 3.8 | 6 |
| 100 | Exploiting differential sample charging in X-ray photoelectron spectroscopy. *Surface Science*, **2006**, 600, 771-772 | 1.8 | 7 |
| 99 | Comparison of water-soluble CdTe nanoparticles synthesized in air and in nitrogen. *Journal of Physical Chemistry B*, **2006**, 110, 16992-7000 | 3.4 | 93 |
| 98 | Fabrication and luminescence of ZnS:Mn2+ nanoflowers. *Journal of Nanoscience and Nanotechnology*, **2005**, 5, 1309-22 | 1.3 | 10 |
| 97 | Studies of Carbon Nanotubes and Fluorinated Nanotubes by X-ray and Ultraviolet Photoelectron Spectroscopy. *Chemistry of Materials*, **2004**, 16, 5427-5436 | 9.6 | 56 |
| 96 | Valence-band x-ray photoelectron spectroscopic studies of vanadium phosphates and the formation of oxide-free phosphate films on metallic vanadium. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1133-1138 | 2.9 | 17 |
| 95 | Interfacial interactions of polymer coatings with oxide-free phosphate films on metal surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1120-1125 | 2.9 | 8 |
| 94 | Valence-band x-ray photoelectron spectroscopic studies of different forms of sodium phosphate. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1126-1132 | 2.9 | 17 |

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| 93 | Valence-band x-ray photoelectron spectroscopic studies of manganese and its oxides interpreted by cluster and band structure calculations. *Surface and Interface Analysis*, **2002**, 33, 274-282 | 1.5 | 150 |
| 92 | Investigation of surface oxides on aluminum alloys by valence band photoemission. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2002**, 20, 1230-1236 | 2.9 | 5 |
| 91 | Phosphorus Pentoxide (P2O5) by XPS. *Surface Science Spectra*, **2002**, 9, 159-165 | 1.2 | 20 |
| 90 | Introduction to Studies of Phosphorus-Oxygen Compounds by XPS. *Surface Science Spectra*, **2002**, 9, 62-66 | 1.2 | 34 |
| 89 | Iron (III) Phosphate (FePO4) by XPS. *Surface Science Spectra*, **2002**, 9, 99-105 | 1.2 | 28 |
| 88 | Iron (II) Phosphate (Fe3(PO4)2 by XPS. *Surface Science Spectra*, **2002**, 9, 91-98 | 1.2 | 18 |
| 87 | Formation of potentially protective oxide-free phosphate films on titanium characterized by valence band x-ray photoelectron spectroscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 1176-1181 | 2.9 | 18 |
| 86 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 24. Interfacial Interactions between Polyimide Resin and Electrochemically Oxidized PAN-Based Carbon Fibers. *Chemistry of Materials*, **2001**, 13, 1647-1655 | 9.6 | 43 |
| 85 | Study of the Corrosion Behavior of Electroplated Iron−Zinc Alloys Using X-ray Photoelectron Spectroscopy. *Journal of Physical Chemistry B*, **2001**, 105, 3957-3964 | 3.4 | 9 |
| 84 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 25. Interfacial Interactions between PEKK Polymer and Carbon Fibers Electrochemically Oxidized in Nitric Acid and Degradation in a Saline Solution. *Chemistry of Materials*, **2001**, 13, 832-841 | 9.6 | 23 |
| 83 | Oxide-Free Phosphate Surface Films on Metals Studied by Core and Valence Band X-ray Photoelectron Spectroscopy. *Chemistry of Materials*, **2001**, 13, 3933-3942 | 9.6 | 46 |
| 82 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 22. Comparison between Surface Treatment of Untreated and Previously Surface-Treated Fibers. *Chemistry of Materials*, **2000**, 12, 1100-1107 | 9.6 | 37 |
| 81 | Oxide-free phosphate films on copper probed by core and valence-band x-ray photoelectron spectroscopic studies in an anaerobic cell. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2000**, 18, 1066-1071 | 2.9 | 14 |
| 80 | X-ray photoelectron spectroscopic studies of sulfates and bisulfates interpreted by X-band band structure calculations. *Surface and Interface Analysis*, **2000**, 29, 265-275 | 1.5 | 43 |
| 79 | Valence band x-ray photoelectron spectroscopic studies to distinguish between oxidized aluminum species. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 1091-1096 | 2.9 | 60 |
| 78 | X-ray Photoelectron Spectroscopic Study of Carbon Fiber Surfaces. 23. Interfacial Interactions between Polyvinyl Alcohol and Carbon Fibers Electrochemically Oxidized in Nitric Acid Solution. *Chemistry of Materials*, **1999**, 11, 2573-2583 | 9.6 | 48 |
| 77 | Introduction to Studies of Aluminum and its Compounds by XPS. *Surface Science Spectra*, **1998**, 5, 1-3 | 1.2 | 63 |
| 76 | Aluminum Foil by XPS. *Surface Science Spectra*, **1998**, 5, 4-10 | 1.2 | 15 |

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| 75 | Nordstrandite (Al(OH)3) by XPS. *Surface Science Spectra*, **1998**, 5, 32-38 | 1.2 | 12 |
| 74 | Core Level and Valence Band Spectra of PbO2 by XPS. *Surface Science Spectra*, **1998**, 5, 104-110 | 1.2 | 17 |
| 73 | Core Level and Valence Band Spectra of PbO by XPS. *Surface Science Spectra*, **1998**, 5, 97-103 | 1.2 | 32 |
| 72 | Aluminum Metaphosphate (Al(PO3)3) by XPS. *Surface Science Spectra*, **1998**, 5, 67-74 | 1.2 | 12 |
| 71 | Diaspore (□AlOOH) by XPS. *Surface Science Spectra*, **1998**, 5, 46-52 | 1.2 | 10 |
| 70 | Core Level and Valence Band Spectra of Lead by XPS. *Surface Science Spectra*, **1998**, 5, 83-89 | 1.2 | 7 |
| 69 | Core Level and Valence Band Spectra of Pb3O4 by XPS. *Surface Science Spectra*, **1998**, 5, 90-96 | 1.2 | 9 |
| 68 | Corrundum (□Al2O3) by XPS. *Surface Science Spectra*, **1998**, 5, 11-17 | 1.2 | 41 |
| 67 | Aluminum Phosphate by XPS. *Surface Science Spectra*, **1998**, 5, 60-66 | 1.2 | 28 |
| 66 | Valence band x-ray photoelectron spectroscopic investigation of surface cleanliness of aluminum metal and its alloys. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1998**, 16, 1112-1116 | 2.9 | 8 |
| 65 | Boehmite (□AlOOH) by XPS. *Surface Science Spectra*, **1998**, 5, 53-59 | 1.2 | 18 |
| 64 | Bayerite (□Al(OH)3) by XPS. *Surface Science Spectra*, **1998**, 5, 39-45 | 1.2 | 9 |
| 63 | Gamma-Alumina (□Al2O3) by XPS. *Surface Science Spectra*, **1998**, 5, 18-24 | 1.2 | 58 |
| 62 | Gibbsite (□Al(OH)3) by XPS. *Surface Science Spectra*, **1998**, 5, 25-31 | 1.2 | 12 |
| 61 | Extracting more chemical information from X-ray photoelectron spectroscopy by using monochromatic X rays. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1997**, 15, 520-525 | 2.9 | 11 |
| 60 | Surface Studies of Potentially Oxidation Protective SiBNC Films for Carbon Fibers. *Chemistry of Materials*, **1997**, 9, 285-296 | 9.6 | 53 |
| 59 | X-ray Photoelectron Spectroscopic Studies of Carbon-fiber Surfaces. 21. Comparison of Carbon Fibers Electrochemically Oxidized in Acid using Achromatic and Monochromatic XPS. *Surface and Interface Analysis*, **1997**, 25, 409-417 | 1.5 | 42 |
| 58 | Electrochemical and XPS Study of the Nickel-Titanium Electrode Surface. *Analytical Chemistry*, **1996**, 68, 3330-7 | 7.8 | 80 |

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| 57 | Electrochemical Oxidation of Molybdenum Metal in 0.5 M H2SO4 Studied by Core and Valence Band X-ray Photoelectron Spectroscopy and Interpreted by Band Structure Calculations. *Chemistry of Materials*, **1996**, 8, 2643-2653 | 9.6 | 21 |
| 56 | Curve fitting in surface analysis and the effect of background inclusion in the fitting process. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1996**, 14, 1424-1432 | 2.9 | 57 |
| 55 | X-ray photoelectron spectroscopic studies of carbon-fiber surfaces. 19. Surface chemical changes during electrochemical oxidation in base. *Surface and Interface Analysis*, **1995**, 23, 551-558 | 1.5 | 27 |
| 54 | Surface studies of the enhanced adsorption of sodium ions onto oxidized surfaces in acetone-containing aqueous solutions. *Surface and Interface Analysis*, **1995**, 23, 659-664 | 1.5 | |
| 53 | An x-ray photoelectron spectroscopic study of voltage bias implantation and nitrogen etching of aluminum. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1995**, 13, 1299-1303 | 2.9 | 7 |
| 52 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 18. Interfacial Interactions between Phenolic Resin and Carbon Fiber Electrochemically Oxidized in Ammonium Carbonate Solution and Their Effect on Oxidation Behavior. *Chemistry of Materials*, **1995**, 7, 1020-1030 | 9.6 | 15 |
| 51 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 20. Interfacial Interactions between Phenolic Resin and Electrochemically Oxidized Carbon Fibers Using Titanium Alkoxide Coupling Agents and Their Effect on Oxidation Behavior. *Chemistry of Materials*, **1995**, 7, 1031-1040 | 9.6 | 19 |
| 50 | Valence-band and core photoelectron spectroscopic studies of molybdenum aqueous oxidation and the influence of argon-ion etching. *Journal of the Chemical Society, Faraday Transactions*, **1995**, 91, 3593 | | 9 |
| 49 | Studies of the effect of size on carbon fiber surfaces. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1994**, 12, 2392-2397 | 2.9 | 13 |
| 48 | X-ray photoelectron spectroscopic study of ion etching and electrical biasing of silicon nitride on a carbon fiber. *Surface and Interface Analysis*, **1994**, 21, 681-690 | 1.5 | 10 |
| 47 | X-ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. 17. Interfacial Interactions between Phenolic Resin and Carbon Fibers Electrochemically Oxidized in Nitric Acid and Phosphoric Acid Solutions, and Their Effect on Oxidation Behavior. *Chemistry of Materials*, **1994**, 6, 788-795 | 9.6 | 39 |
| 46 | Core and valence band photoelectron spectroscopic studies of nickel oxidation in an anaerobic liquid cell. *Analytical Chemistry*, **1993**, 65, 2276-2281 | 7.8 | 25 |
| 45 | Core and valence-band photoelectron spectroscopic studies of nickel interaction with etidronic acid. *Chemistry of Materials*, **1993**, 5, 1554-1560 | 9.6 | 8 |
| 44 | Valence band x-ray photoelectron spectroscopic studies of carbonate, bicarbonate and formate interpreted by X□calculations. *Surface and Interface Analysis*, **1993**, 20, 595-599 | 1.5 | 16 |
| 43 | X-Ray Photoelectron Spectroscopy Studies of Photochemical Changes in High-Performance Fibers. *Applied Spectroscopy*, **1993**, 47, 139-149 | 3.1 | 29 |
| 42 | E-120 Pitch-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 210-215 | 1.2 | 5 |
| 41 | E-35 Pitch-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 198-203 | 1.2 | 3 |
| 40 | P55X Pitch-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 192-197 | 1.2 | 4 |

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| 39 | Core Level and Valence Band XPS Spectra of E-120 Pitch-based Carbon Fiber Potentiostatically Oxidized in (NH4)2CO3 Solution. *Surface Science Spectra*, **1992**, 1, 247-252 | 1.2 | 2 |
| 38 | AS4 PAN-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 306-311 | 1.2 | 3 |
| 37 | Core Level and Valence Band XPS Spectra of E-120 Pitch-based Carbon Fiber Galvanostatically Oxidized in HNO3 Solution. *Surface Science Spectra*, **1992**, 1, 265-270 | 1.2 | 2 |
| 36 | Type II PAN-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 216-221 | 1.2 | 2 |
| 35 | Core Level and Valence Band XPS Spectra of E-120 Pitch-based Carbon Fiber Galvanostatically Oxidized in (NH4)2CO3 Solution. *Surface Science Spectra*, **1992**, 1, 271-276 | 1.2 | 2 |
| 34 | Core Level and Valence Band XPS Spectra of E-120 Pitch-based Carbon Fiber Potentiostatically Oxidized in HNO3 Solution. *Surface Science Spectra*, **1992**, 1, 259-264 | 1.2 | 2 |
| 33 | E-75 Pitch-based Carbon Fiber by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 204-209 | 1.2 | 1 |
| 32 | Highly Oriented Pyrolytic Graphite by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 253-258 | 1.2 | 4 |
| 31 | Valence band photoemission studies of corrosion inhibitor action on iron surfaces: effect of etidronate. *Chemistry of Materials*, **1992**, 4, 133-140 | 9.6 | 19 |
| 30 | X-Ray Photoelectron Spectroscopic Studies of Carbon Fiber Surfaces. Part XVI: Core-Level and Valence-Band Studies of Pitch-Based Fibers Electrochemically Treated in Ammonium Carbonate Solution. *Applied Spectroscopy*, **1992**, 46, 645-651 | 3.1 | 27 |
| 29 | Ultrahigh Purity Graphite Electrode by Core Level and Valence Band XPS. *Surface Science Spectra*, **1992**, 1, 367-372 | 1.2 | 24 |
| 28 | X-Ray Photoelectron Spectroscopic Studies of Carbon Fibers. Part XV: Electrochemical Treatment on Pitch-Based Fibers by Potentiostatic and Galvanostatic Methods. *Applied Spectroscopy*, **1991**, 45, 1158-1165 | 3.1 | 31 |
| 27 | XPS studies of solvated metal atom dispersed (SMAD) catalysts. Evidence for layered cobalt-manganese particles on alumina and silica. *Journal of the American Chemical Society*, **1991**, 113, 855-861 | 16.4 | 764 |
| 26 | XPS studies of gold films prepared from nonaqueous gold colloids. *Langmuir*, **1990**, 6, 105-113 | 4 | 17 |
| 25 | X-Ray Photoelectron-Spectroscopic Studies of Carbon Fiber Surfaces. Part XII: The Effect of Microwave Plasma Treatment on Pitch-Based Carbon Fiber Surfaces. *Applied Spectroscopy*, **1990**, 44, 797-803 | 3.1 | 57 |
| 24 | X-Ray Photoelectron Spectroscopic Studies of Carbon Fibers. Part XIV: Electrochemical Treatment of Pitch-Based Fibers and the Surface and Bulk Structure Changes Monitored by XPS, XRD, and SEM. *Applied Spectroscopy*, **1990**, 44, 1621-1628 | 3.1 | 47 |
| 23 | X-Ray Photoelectron-Spectroscopic Studies of Carbon Fiber Surfaces. Part IX: The Effect of Microwave Plasma Treatment on Carbon Fiber Surfaces. *Applied Spectroscopy*, **1989**, 43, 1153-1158 | 3.1 | 78 |
| 22 | Surface Studies of the Nickel Electrode System Using a Special Transfer Cell. *Applied Spectroscopy*, **1988**, 42, 658-666 | 3.1 | 3 |

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| 21 | An X-ray photoelectron spectroscopic study of a nitric acid/argon ion cleaned uranium metal surface at elevated temperature. *Surface and Interface Analysis*, **1987**, 10, 238-241 | 1.5 | 5 |
| 20 | X-ray photoelectron spectroscopic studies of carbon fibre surfaces. *Journal of Materials Science*, **1987**, 22, 1585-1596 | 4.3 | 95 |
| 19 | An X-Ray Photoelectron Spectroscopic Study of Some Ammonium Uranates. *Applied Spectroscopy*, **1986**, 40, 519-525 | 3.1 | 7 |
| 18 | X-ray photoelectron-spectroscopic studies of carbon-fibre surfaces. Part 5.The effect of pH on surface oxidation. *Journal of the Chemical Society Faraday Transactions I*, **1985**, 81, 2745 | | 126 |
| 17 | X-Ray photoelectron spectroscopic studies of the surface of sputter ion plated films. *Surface and Interface Analysis*, **1984**, 6, 261-266 | 1.5 | 122 |
| 16 | X-ray photoelectron spectroscopic studies of the iridium electrode system. *Journal of the Chemical Society Faraday Transactions I*, **1984**, 80, 135 | | 37 |
| 15 | X-ray photoelectron spectroscopic studies of carbon-fibre surfaces. Part 4.The effect of electrochemical treatment in nitric acid. *Journal of the Chemical Society Faraday Transactions I*, **1984**, 80, 2099 | | 121 |
| 14 | X-ray photoelectron spectroscopic studies of carbon fibre surfaces. *Carbon*, **1983**, 21, 53-59 | 10.4 | 140 |
| 13 | Characterization of Films Formed on Tungsten Electrodes in Molten Nitrates Using Electrochemical and X-Ray Photoelectron Spectroscopic Studies. *Journal of the Electrochemical Society*, **1983**, 130, 2199-2205 | 3.9 | 8 |
| 12 | Data analysis techniques in x-ray photoelectron spectroscopy. *Analytical Chemistry*, **1982**, 54, 13-19 | 7.8 | 316 |
| 11 | X-ray photoelectron spectroscopic studies of carbon fibre surfaces. I. carbon fibre spectra and the effects of heat treatment. *Journal of Electron Spectroscopy and Related Phenomena*, **1982**, 27, 39-56 | 1.7 | 113 |
| 10 | X-ray photoelectron spectroscopic studies of carbon fibre surfaces. IIIndustrially treated fibres and the effect of heat and exposure to oxygen. *Surface and Interface Analysis*, **1982**, 4, 212-219 | 1.5 | 65 |
| 9 | Smoothing of digital x-ray photoelectron spectra by an extended sliding least-squares approach. *Analytical Chemistry*, **1980**, 52, 2315-2321 | 7.8 | 121 |
| 8 | Dissolution and passivation of nickel. An X-ray photoelectron spectroscopic study. *Journal of the Chemical Society Faraday Transactions I*, **1977**, 73, 327 | | 110 |
| 7 | X-ray photoelectron spectroscopic study of the film formed on a gold electrode during the electrochemical reduction of chromium(VI). *Journal of the Chemical Society Faraday Transactions I*, **1976**, 72, 686 | | 38 |
| 6 | Analysis of the X-ray photoelectron spectra of transition metal compounds using approximate molecular orbital theories. *Journal of the Chemical Society, Faraday Transactions 2*, **1976**, 72, 1791 | | 27 |
| 5 | X-ray photoelectron spectroscopic studies of some iodine compounds. *Journal of the Chemical Society, Faraday Transactions 2*, **1976**, 72, 1805 | | 68 |
| 4 | X-ray photoelectron spectroscopic studies of oxide films on platinum and gold electrodes. *Journal of the Chemical Society Faraday Transactions I*, **1975**, 71, 298 | | 150 |

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| 3 | Covalent character of lithium compounds studied by X-ray photoelectron spectroscopy. *Journal of the Chemical Society, Faraday Transactions 2*, **1974**, 70, 1240 | 22 |
| 2 | X-Ray photoelectron spectroscopy of some dimethylamino-substituted cyclotriphosphazenes. *Journal of the Chemical Society Dalton Transactions*, **1973**, 1042 | 5 |
| 1 | Valency at Electrode Surfaces7498-7515 | |