

Andrew G Thomas

List of Publications by Year in descending order

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114
papers

3,267
citations

182225

30
h-index

198040

52
g-index

116
all docs

116
docs citations

116
times ranked

5882
citing authors

#	ARTICLE	IF	CITATIONS
1	Sustainable synthesis of organic framework-derived ZnO nanoparticles for fabrication of supercapacitor electrode. <i>Environmental Technology (United Kingdom)</i> , 2022, 43, 605-616.	1.2	24
2	Sustainable hydrothermal synthesis of cobalt-nickel nanomaterial for supercapacitor using green stabilizing agents. <i>International Journal of Energy Research</i> , 2022, 46, 4599-4608.	2.2	6
3	Phytogetic synthesis and enhanced photocatalytic properties of ZnO/Co ₃ O ₄ p-n junction: biomimetic water remediators. <i>Ionics</i> , 2022, 28, 1999.	1.2	2
4	Introducing X-ray photoelectron spectroscopy for corrosion studies: A tool for elucidating interfacial composition and chemistry. , 2022, , 723-745.		0
5	High efficiency semitransparent perovskite solar cells containing 2D nanopore arrays deposited in a single step. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10227-10241.	5.2	5
6	Biomimetic ZrO ₂ @ PdO nanocomposites: fabrication, characterization, and water splitting potential exploration. <i>International Journal of Energy Research</i> , 2022, 46, 8516-8526.	2.2	10
7	Laser-Assisted Ultrafast Fabrication of Crystalline Ta-Doped TiO ₂ for High-Humidity-Processed Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15141-15153.	4.0	11
8	4-Mercaptobenzoic Acid Adsorption on TiO ₂ Anatase (101) and TiO ₂ Rutile (110) Surfaces. <i>Surfaces</i> , 2022, 5, 238-250.	1.0	1
9	Electrochemical trapping of meta-stable NiO consolidated ZnO/PdO by biomimetic provenance for the employment of clean energy generation. <i>Materials Science in Semiconductor Processing</i> , 2022, 150, 106867.	1.9	10
10	Impact of halide additives on green antisolvent and high-humidity processed perovskite solar cells. <i>Applied Surface Science</i> , 2021, 536, 147949.	3.1	11
11	Ultrafast and Scalable Laser-Induced Crystallization of Titanium Dioxide Films for Planar Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2000562.	3.1	7
12	Modified sol-gel synthesis of Co ₃ O ₄ nanoparticles using organic template for electrochemical energy storage. <i>Energy</i> , 2021, 218, 119502.	4.5	36
13	Homologous alkyl side-chain diphosphonate inhibitors for the corrosion protection of carbon steels. <i>Chemical Engineering Journal</i> , 2021, 405, 126864.	6.6	21
14	Bioinspired scaffolds that sequester lead ions in physically damaged high efficiency perovskite solar cells. <i>Chemical Communications</i> , 2021, 57, 994-997.	2.2	24
15	Facile synthesis of ZnO-CoMoO ₄ nanocomposite using bio-organic fuel for energy storage application. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 8460-8474.	1.1	5
16	Inelastic background modelling applied to hard X-ray photoelectron spectroscopy of deeply buried layers: A comparison of synchrotron and lab-based (9.25 ÅkeV) measurements. <i>Applied Surface Science</i> , 2021, 541, 148635.	3.1	35
17	Semi-conducting Ni/Zn nano-hybrids™ driven efficient electro-catalytic performance: fabrication, characterization, and electrochemical features™ elucidation. <i>Green Chemistry Letters and Reviews</i> , 2021, 14, 286-301.	2.1	18
18	Electrochemical energy storage by nanosized MoO ₃ /PdO material: Investigation of its structural, optical and electrochemical properties for supercapacitor. <i>Journal of Energy Storage</i> , 2021, 36, 102447.	3.9	10

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19	Synthesis of facile ZnO : NiO@PdO@Pd nanomaterial by organic fuel: Environmentally benign electrode material for energy storage. International Journal of Energy Research, 2021, 45, 16284-16293.	2.2	1
20	Preparation of Organo-Stabilized Mn ₃ O ₄ Nanostructures as an Electro-Catalyst for Clean Energy Generation. Journal of Electronic Materials, 2021, 50, 5150-5160.	1.0	5
21	Role of Alkali Cations in Stabilizing Mixed-Cation Perovskites to Thermal Stress and Moisture Conditions. ACS Applied Materials & Interfaces, 2021, 13, 43573-43586.	4.0	16
22	Facile ZnO-based nanomaterial and its fabrication as a supercapacitor electrode: synthesis, characterization and electrochemical studies. RSC Advances, 2021, 11, 23374-23384.	1.7	50
23	Flexible nanoporous activated carbon for adsorption of organics from industrial effluents. Nanoscale, 2021, 13, 15311-15323.	2.8	26
24	Near-Ambient Pressure XPS and NEXAFS Study of a Superbasic Ionic Liquid with CO ₂ . Journal of Physical Chemistry C, 2021, 125, 22778-22785.	1.5	10
25	Controlling the Thermoelectric Properties of Nb-Doped TiO ₂ Ceramics through Engineering Defect Structures. ACS Applied Materials & Interfaces, 2021, 13, 57326-57340.	4.0	21
26	Improving the Efficiency, Stability, and Adhesion of Perovskite Solar Cells Using Nanogel Additive Engineering. ACS Applied Materials & Interfaces, 2021, 13, 58640-58651.	4.0	2
27	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo _{1-x} W _x S ₂ and Mo _{1-x} W _x O ₃ Alloys (0 ≤ x ≤ 1). Chemistry of Materials, 2020, 32, 7895-7907.	3.2	13
28	Evaluation of electrochemical properties of organic template assisted PdO incorporated NiO for H ₂ /O ₂ evolution. Microchemical Journal, 2020, 158, 105282.	2.3	2
29	Green synthesis of ZnO@Co ₃ O ₄ nanocomposite using facile foliar fuel and investigation of its electrochemical behaviour for supercapacitors. New Journal of Chemistry, 2020, 44, 18281-18292.	1.4	46
30	Phyto-inspired and scalable approach for the synthesis of PdO@Mn ₂ O ₃ : a nano-material for application in water splitting electro-catalysis. RSC Advances, 2020, 10, 29961-29974.	1.7	15
31	A bilayer TiO ₂ /Al ₂ O ₃ as the mesoporous scaffold for enhanced air stability of ambient-processed perovskite solar cells. Materials Advances, 2020, 1, 2057-2067.	2.6	18
32	Design-controlled synthesis of IrO ₂ sub-monolayers on Au nanoflowers: marrying plasmonic and electrocatalytic properties. Nanoscale, 2020, 12, 12281-12291.	2.8	20
33	Evaluation of electrochemical properties for water splitting by NiO nano-cubes synthesized using Olea ferruginea Royle. Sustainable Energy Technologies and Assessments, 2020, 40, 100753.	1.7	16
34	Surface Engineering of Ceramic Nanomaterials for Separation of Oil/Water Mixtures. Frontiers in Chemistry, 2020, 8, 578.	1.8	14
35	Organic template-based ZnO embedded Mn ₃ O ₄ nanoparticles: synthesis and evaluation of their electrochemical properties towards clean energy generation. RSC Advances, 2020, 10, 9854-9867.	1.7	21
36	Using Soft Polymer Template Engineering of Mesoporous TiO ₂ Scaffolds to Increase Perovskite Grain Size and Solar Cell Efficiency. ACS Applied Materials & Interfaces, 2020, 12, 18578-18589.	4.0	27

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37	Organic template-assisted green synthesis of CoMoO ₄ nanomaterials for the investigation of energy storage properties. RSC Advances, 2020, 10, 8115-8129.	1.7	52
38	Effect of NiO on organic framework functionalized ZnO nanoparticles for energy storage application. International Journal of Energy Research, 2020, 44, 5259-5271.	2.2	29
39	Functionalization of MoO ₃ NiMoO ₄ nanocomposite using organic template for energy storage application. Journal of Energy Storage, 2020, 29, 101309.	3.9	38
40	Ultra-Low-Power Current Sensor Utilizing Magnetoelectric Nanowires. IEEE Sensors Journal, 2020, 20, 5139-5145.	2.4	8
41	Effects of bioactive compounds on the morphology and surface chemistry of MoO ₃ /ZnMoO ₄ nanocomposite for supercapacitor. Journal of Materials Science, 2020, 55, 7743-7759.	1.7	21
42	Synthesis and analysis of ZnO@CoMoO ₄ incorporated organic compounds for efficient degradation of azo dye pollutants under dark ambient conditions. Applied Organometallic Chemistry, 2020, 34, e5733.	1.7	6
43	Versailles Project on Advanced Materials and Standards interlaboratory study on intensity calibration for x-ray photoelectron spectroscopy instruments using low-density polyethylene. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 063208.	0.9	21
44	A molecular precursor route to quaternary chalcogenide CFTS (Cu ₂ FeSnS ₄) powders as potential solar absorber materials. RSC Advances, 2019, 9, 24146-24153.	1.7	28
45	Interaction of a tripeptide with titania surfaces: RGD adsorption on rutile TiO ₂ (110) and model dental implant surfaces. Materials Science and Engineering C, 2019, 105, 110030.	3.8	7
46	Air-Stable Methylammonium Lead Iodide Perovskite Thin Films Fabricated via Aerosol-Assisted Chemical Vapor Deposition from a Pseudohalide Pb(SCN) ₂ Precursor. ACS Applied Energy Materials, 2019, 2, 6012-6022.	2.5	13
47	Renewable Adsorbent for the Separation of Surfactant-Stabilized Oil in Water Emulsions Based on Nanostructured Sawdust. ACS Sustainable Chemistry and Engineering, 2019, 7, 18935-18942.	3.2	28
48	Adsorption site, orientation and alignment of NO adsorbed on Au(100) using 3D-velocity map imaging, X-ray photoelectron spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2019, 21, 10939-10946.	1.3	11
49	Reversible Reaction of CO ₂ with Superbasic Ionic Liquid [P ₆₆₆₁₄][benzim] Studied with in Situ Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 7134-7141.	1.5	4
50	Preliminary study of hydroxyapatite particles air abrasive blasting on Mg-4Zn-0.3Ca surface. AIP Conference Proceedings, 2019, . .	0.3	0
51	The effect of Eu doping on the growth, structure and red-ox activity of ceria nanocubes. CrystEngComm, 2018, 20, 1698-1704.	1.3	19
52	Optical and electrical studies of CdS thin films with thickness variation. Optik, 2018, 158, 1558-1566.	1.4	44
53	Towards substrate engineering of graphene-silicon Schottky diode photodetectors. Nanoscale, 2018, 10, 3399-3409.	2.8	43
54	A one-step laser process for rapid manufacture of mesoscopic perovskite solar cells prepared under high relative humidity. Sustainable Energy and Fuels, 2018, 2, 1216-1224.	2.5	13

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55	Black phosphorus with near-superhydrophobic properties and long-term stability in aqueous media. <i>Chemical Communications</i> , 2018, 54, 3831-3834.	2.2	28
56	Water-induced reordering in ultrathin ionic liquid films. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 334003.	0.7	8
57	Corrosion protection of carbon steel by tetraphosphonates of systematically different molecular size. <i>Corrosion Science</i> , 2018, 145, 135-150.	3.0	51
58	Ambient-air-stable inorganic Cs ₂ Sn ₆ double perovskite thin films via aerosol-assisted chemical vapour deposition. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11205-11214.	5.2	85
59	Role of Ag ¹⁺ substitutional defects on the electronic and optical properties of n-type CdS thin films semiconductor for sustainable and stable window layer in solar cells technology. <i>Optical Materials</i> , 2018, 85, 143-152.	1.7	11
60	Chemical vapour deposition of chromium-doped tungsten disulphide thin films on glass and steel substrates from molecular precursors. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9537-9544.	2.7	8
61	Formation and Characterization of Model Iron Sulfide Scales with Disulfides and Thiols on Steel Pipeline Materials by an Aerosol-Assisted Chemical Vapor Method. <i>Energy & Fuels</i> , 2017, 31, 2496-2500.	2.5	0
62	In situ investigation of degradation at organometal halide perovskite surfaces by X-ray photoelectron spectroscopy at realistic water vapour pressure. <i>Chemical Communications</i> , 2017, 53, 5231-5234.	2.2	78
63	Reduced electrical performance of Zn enriched ZnTe nano-inclusion semiconductor thin films for buffer layer in solar cells. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 255503.	1.3	14
64	Exploring the versatility of liquid phase exfoliation: producing 2D nanosheets from talcum powder, cat litter and beach sand. <i>2D Materials</i> , 2017, 4, 025054.	2.0	39
65	Structure and Reactivity of a Model Oxide Supported Silver Nanocluster Catalyst Studied by Near Ambient Pressure X-ray Photoelectron Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21383-21389.	1.5	37
66	Dual Functionalization of Liquid-Exfoliated Semiconducting 2D MoS ₂ with Lanthanide Complexes Bearing Magnetic and Luminescence Properties. <i>Advanced Functional Materials</i> , 2017, 27, 1703646.	7.8	23
67	Toward optimizing dental implant performance: Surface characterization of Ti and TiZr implant materials. <i>Dental Materials</i> , 2017, 33, 43-53.	1.6	26
68	Nanostructured Aptamer-Functionalized Black Phosphorus Sensing Platform for Label-Free Detection of Myoglobin, a Cardiovascular Disease Biomarker. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22860-22868.	4.0	208
69	Ionic Liquid Ordering at an Oxide Surface. <i>ChemPhysChem</i> , 2016, 17, 3430-3434.	1.0	17
70	Versailles Project on Advanced Materials and Standards Interlaboratory Study on Measuring the Thickness and Chemistry of Nanoparticle Coatings Using XPS and LEIS. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24070-24079.	1.5	33
71	An Experimental Investigation of the Adsorption of a Phosphonic Acid on the Anatase TiO ₂ (101) Surface. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1693-1700.	1.5	66
72	An ex situ study of the adsorption of calcium phosphate from solution onto TiO ₂ (110) and Al ₂ O ₃ (0001). <i>Surface Science</i> , 2016, 646, 146-153.	0.8	22

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73	Photoelectron Spectroscopy Study of Stoichiometric and Reduced Anatase TiO ₂ (101) Surfaces: The Effect of Subsurface Defects on Water Adsorption at Near-Ambient Pressures. Journal of Physical Chemistry C, 2015, 119, 13682-13690.	1.5	195
74	Chemically-specific time-resolved surface photovoltage spectroscopy: Carrier dynamics at the interface of quantum dots attached to a metal oxide. Surface Science, 2015, 641, 320-325.	0.8	17
75	Dynamics in next-generation solar cells: time-resolved surface photovoltage measurements of quantum dots chemically linked to ZnO (101 ₁ ,0). Faraday Discussions, 2014, 171, 275-298.	1.6	20
76	Multitechnique characterization of CPTi surfaces after electro discharge machining (EDM). Clinical Oral Investigations, 2014, 18, 67-75.	1.4	9
77	Adsorption and Photocatalytic Degradation of 3-Fluoroaniline on Anatase TiO ₂ (101): A Photoemission and Near-Edge X-ray Absorption Fine Structure Study. Journal of Physical Chemistry C, 2014, 118, 2028-2036.	1.5	7
78	Adsorption Studies of <i>p</i> -Aminobenzoic Acid on the Anatase TiO ₂ (101) Surface. Langmuir, 2014, 30, 12306-12314.	1.6	55
79	Wet chemically prepared rutile TiO ₂ (110) and TiO ₂ (011): Substrate preparation for surface studies under non-UHV conditions. Surface Science, 2014, 630, 41-45.	0.8	9
80	Adsorption of Dopamine on Rutile TiO ₂ (110): A Photoemission and Near-Edge X-ray Absorption Fine Structure Study. Langmuir, 2014, 30, 8761-8769.	1.6	18
81	Adsorption and stability of malonic acid on rutile TiO ₂ (110), studied by near edge X-ray absorption fine structure and photoelectron spectroscopy. Surface Science, 2014, 626, 14-20.	0.8	11
82	Time-resolved surface photovoltage measurements at n -type photovoltaic surfaces: Si(111) and ZnO(100) <i>et al.</i> Review B, 2013, 88, 045407.	1.1	61
83	Adsorbate-Induced Modification of Surface Electronic Structure: Pyrocatechol Adsorption on the Anatase TiO ₂ (101) and Rutile TiO ₂ (110) Surfaces. Journal of Physical Chemistry C, 2012, 116, 23515-23525.	1.5	57
84	Pyrocatechol as a surface capping molecule on rutile TiO ₂ (110). Surface Science, 2012, 606, 273-277.	0.8	8
85	PEGylation of Nanosubstrates (Titania) with Multifunctional Reagents: At the Crossroads between Nanoparticles and Nanocomposites. Langmuir, 2012, 28, 11490-11501.	1.6	19
86	Observation of UV-induced Auger features in catechol adsorbed on anatase TiO ₂ (101) single crystal surface. Applied Physics Letters, 2012, 100, 171603.	1.5	4
87	Adsorption of organic molecules on rutile TiO ₂ and anatase TiO ₂ single crystal surfaces. Chemical Society Reviews, 2012, 41, 4207.	18.7	234
88	Surface characterization of SLActive dental implants. The European Journal of Esthetic Dentistry: Official Journal of the European Academy of Esthetic Dentistry, 2012, 7, 72-92.	0.3	8
89	Comparison of the electronic structure of LnBaCo ₂ O ₅ + δ (Ln=Gd, Dy; Ln-112) and LnBaCo ₄ O ₇ (Ln=Yb; Ln-112) Related Phenomena, 2011, 184, 227-231.	0.8	0
90	Surface characterization of zirconia dental implants. Dental Materials, 2010, 26, 295-305.	1.6	75

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91	Dopamine Adsorption on Anatase TiO ₂ (101): A Photoemission and NEXAFS Spectroscopy Study. Langmuir, 2010, 26, 14548-14555.	1.6	85
92	Fundamental Interactions at Oxide Surfaces: Understanding Novel Dye-sensitised Solar Cells. , 2009, , .		0
93	Large single crystals of LnBaCo ₂ O _{5.5} : Initial nucleation, growth and study. Journal of Crystal Growth, 2008, 310, 1867-1874.	0.7	7
94	Preparation of Ligand-Free TiO ₂ (Anatase) Nanoparticles through a Nonaqueous Process and Their Surface Functionalization. Langmuir, 2008, 24, 6988-6997.	1.6	68
95	Electronic properties of the interface between p-CuI and anatase-phase n-TiO ₂ single crystal and nanoparticulate surfaces: A photoemission study. Journal of Chemical Physics, 2007, 127, 114703.	1.2	40
96	Comparison of the electronic structure of anatase and rutile TiO ₂ single-crystal surfaces using resonant photoemission and x-ray absorption spectroscopy. Physical Review B, 2007, 75, .	1.1	249
97	Adsorption of phenylalanine on single crystal rutile TiO ₂ (110) surface. Surface Science, 2007, 601, 3828-3832.	0.8	37
98	Adsorption of bi-isonicotinic acid on anatase TiO ₂ (101) and (001) studied by photoemission and NEXAFS spectroscopy. Surface Science, 2005, 592, 159-168.	0.8	27
99	Resonant photoemission of transition metal perovskites. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 777-782.	0.8	1
100	Resonant photoemission of single-crystal RBaCo ₂ O _{5+δ} (R=Gd, Dy). Physical Review B, 2004, 70, .	1.1	41
101	ELECTRONIC STRUCTURE AND REACTIVITY OF TM-DOPED La _{1-x} Sr _x CoO ₃ (TM = Ni, Fe) CATALYSTS. Surface Review and Letters, 2002, 09, 277-283.	0.5	2
102	Resonance photoemission of LaCoO ₃ (111) and La _{0.9} Sr _{0.1} CoO ₃ (111). Journal of Physics Condensed Matter, 2000, 12, 9259-9279.	0.7	13
103	Orientation of o-nitrophenol adsorbed on LaCoO ₃ (111). Surface Science, 2000, 454-456, 131-136.	0.8	0
104	Electronic structure and reactivity of La _{1-x} Sr _x Co _{1-y} Cu _y O ₃ and La _{2-x} Sr _x Co _{1-y} Cu _y O ₄ . Journal of Electron Spectroscopy and Related Phenomena, 1999, 101-103, 765-769.	0.8	5
105	Photoemission studies of single crystal CuO(100). Journal of Physics Condensed Matter, 1999, 11, 5021-5043.	0.7	24
106	Electronic structure and surface reactivity of La _{1-x} Sr _x CoO ₃ . Faraday Discussions, 1999, 114, 407-420.	1.6	13
107	Adsorption of H ₂ O on single crystal CuO. Surface Science, 1999, 436, 1-8.	0.8	22
108	Angle-resolved photoemission of CuO (100). Surface Science, 1997, 377-379, 256-260.	0.8	3

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109	Angle-resolved photoemission of Y-doped Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Surface Science, 1996, 352-354, 788-792.	0.8	1
110	Electronic structure, reactivity and solid-state chemistry of La _{2-x} Sr _x Ni _{1-y} Fe _y O ₄ + δ . Faraday Discussions, 1996, 105, 337-354.	1.6	19
111	Photoemission and HREELS study of K adsorption on TiO ₂ (100). Journal of the Chemical Society, Faraday Transactions, 1995, 91, 3569-3573.	1.7	37
112	Soft X-ray photon stimulated ion desorption from SrTiO ₃ (100)-H ₂ O. Surface Science, 1994, 307-309, 355-359.	0.8	5
113	Oxygen-vacancy sites on TiO ₂ (100)1 Å - ³ using surface core-level-shift photoelectron diffraction. Physical Review B, 1993, 47, 16056-16059.	1.1	61
114	A photoemission study to confirm the second order nature of anomalous O 2s resonant enhancement of Bi ₂ Sr ₂ CaCu ₂ O ₈ (001) fermi level states. Physica C: Superconductivity and Its Applications, 1991, 185-189, 1047-1048.	0.6	2