

# David Richard Graham Mitchell

## List of Publications by Year in descending order

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162  
papers

6,026  
citations

66315

42  
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91828

69  
g-index

165  
all docs

165  
docs citations

165  
times ranked

8613  
citing authors

#	ARTICLE	IF	CITATIONS
1	DiffTools: Electron diffraction software tools for DigitalMicrograph®, <i>Microscopy Research and Technique</i> , 2008, 71, 588-593.	1.2	212
2	Modification of TiO <sub>2</sub> for Enhanced Surface Properties: A Finite Ostwald Ripening by a Microwave Hydrothermal Process. <i>Langmuir</i> , 2006, 22, 2016-2027.	1.6	189
3	Schwertmannite transformation to goethite via the Fe(II) pathway: Reaction rates and implications for iron-sulfide formation. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 4551-4564.	1.6	168
4	Microstructural and associated chemical changes during the composting of a high temperature biochar: Mechanisms for nitrate, phosphate and other nutrient retention and release. <i>Science of the Total Environment</i> , 2018, 618, 1210-1223.	3.9	163
5	Reductive transformation of iron and sulfur in schwertmannite-rich accumulations associated with acidified coastal lowlands. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 4456-4473.	1.6	156
6	Scripting-customised microscopy tools for Digital Micrograph®, <i>Ultramicroscopy</i> , 2005, 103, 319-332.	0.8	150
7	Mineral-Biochar Composites: Molecular Structure and Porosity. <i>Environmental Science &amp; Technology</i> , 2016, 50, 7706-7714.	4.6	148
8	Ultra-high thermoelectric performance in graphene incorporated Cu <sub>2</sub> Se: Role of mismatching phonon modes. <i>Nano Energy</i> , 2018, 53, 993-1002.	8.2	145
9	Biochar bound urea boosts plant growth and reduces nitrogen leaching. <i>Science of the Total Environment</i> , 2020, 701, 134424.	3.9	137
10	Exposed Surfaces on Shape-Controlled Ceria Nanoparticles Revealed through AC-TEM and Water-Gas Shift Reactivity. <i>ChemSusChem</i> , 2013, 6, 1898-1906.	3.6	134
11	Modulation of Photocatalytic Properties by Strain in 2D BiOBr Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 27592-27596.	4.0	130
12	Nucleation and Growth of Fe Nanoparticles in SiO <sub>2</sub> : A TEM, XPS, and Fe L-Edge XANES Investigation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 20978-20985.	1.5	122
13	Chemolithotrophic processes in the bacterial communities on the surface of mineral-enriched biochars. <i>ISME Journal</i> , 2017, 11, 1087-1101.	4.4	121
14	Phase Stability of Zirconia-Based Thermal Barrier Coatings: Mechanistic Insights. <i>Journal of the American Ceramic Society</i> , 2011, 94, s168.	1.9	119
15	Iron-Monosulfide Oxidation in Natural Sediments: Resolving Microbially Mediated S Transformations Using XANES, Electron Microscopy, and Selective Extractions. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3128-3134.	4.6	111
16	Phase Separation in Liquid Metal Nanoparticles. <i>Matter</i> , 2019, 1, 192-204.	5.0	110
17	Interaction of silica fume with calcium hydroxide solutions and hydrated cement pastes. <i>Cement and Concrete Research</i> , 1998, 28, 1571-1584.	4.6	104
18	Gold Nanoparticle Incorporation into Porous Titania Networks Using an Agarose Gel Templating Technique for Photocatalytic Applications. <i>Chemistry of Materials</i> , 2008, 20, 3917-3926.	3.2	103

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19	Transmission electron microscopy studies of atomic layer deposition TiO <sub>2</sub> films grown on silicon. <i>Thin Solid Films</i> , 2003, 441, 85-95.	0.8	94
20	Nanoscale analyses of the surface structure and composition of biochars extracted from field trials or after co-composting using advanced analytical electron microscopy. <i>Geoderma</i> , 2017, 294, 70-79.	2.3	84
21	Synthesis, structural and electrochemical properties of sodium nickel phosphate for energy storage devices. <i>Nanoscale</i> , 2016, 8, 11291-11305.	2.8	80
22	Biochar-based fertilizer: Supercharging root membrane potential and biomass yield of rice. <i>Science of the Total Environment</i> , 2020, 713, 136431.	3.9	78
23	Feeding Biochar to Cows: An Innovative Solution for Improving Soil Fertility and Farm Productivity. <i>Pedosphere</i> , 2015, 25, 666-679.	2.1	74
24	New insights into the electrochemistry of magnesium molybdate hierarchical architectures for high performance sodium devices. <i>Nanoscale</i> , 2018, 10, 13277-13288.	2.8	74
25	Thermoelectric Performance of <i>n</i> -Type (PbTe) <sub>0.75</sub> (PbS) <sub>0.15</sub> (PbSe) <sub>0.1</sub> Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 11476-11483.	4.0	69
26	Calcined chicken eggshell electrode for battery and supercapacitor applications. <i>RSC Advances</i> , 2019, 9, 26981-26995.	1.7	69
27	Fabrication of surface magnetic nanoclusters using low energy ion implantation and electron beam annealing. <i>Nanotechnology</i> , 2011, 22, 115602.	1.3	67
28	Ultra-High Thermoelectric Performance in Bulk BiSbTe/Amorphous Boron Composites with Nano-Defect Architectures. <i>Advanced Energy Materials</i> , 2020, 10, 2000757.	10.2	67
29	Heterogeneous Distribution of Sodium for High Thermoelectric Performance of <i>p</i> -Type Multiphase Lead-Chalcogenides. <i>Advanced Energy Materials</i> , 2015, 5, 1501047.	10.2	63
30	Lowering N <sub>2</sub> O emissions from soils using eucalypt biochar: the importance of redox reactions. <i>Scientific Reports</i> , 2015, 5, 16773.	1.6	61
31	Circular Hough transform diffraction analysis: A software tool for automated measurement of selected area electron diffraction patterns within Digital Micrograph®, <i>Ultramicroscopy</i> , 2008, 108, 367-374.	0.8	58
32	Atomic layer deposition of TiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> thin films and nanolaminates. <i>Smart Materials and Structures</i> , 2006, 15, S57-S64.	1.8	57
33	Significant Enhancement of Thermoelectric Figure of Merit in BiSbTe-Based Composites by Incorporating Carbon Microfiber. <i>Advanced Functional Materials</i> , 2021, 31, 2008851.	7.8	57
34	Fabrication, characterization, and leach testing of hollandite, (Ba,Cs)(Al,Ti) <sub>2</sub> Ti <sub>6</sub> O <sub>16</sub> . <i>Journal of Materials Research</i> , 2002, 17, 2578-2589.	1.2	56
35	Effective gel for gold nanoparticle formation, support and metal oxide templating. <i>Chemical Communications</i> , 2007, , 3060.	2.2	51
36	Titanate ceramics for immobilisation of uranium-rich radioactive wastes arising from <sup>99</sup> Mo production. <i>Journal of Nuclear Materials</i> , 2009, 384, 322-326.	1.3	50

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37	Rapid formation of self-organised Ag nanosheets with high efficiency and selectivity in CO <sub>2</sub> electroreduction to CO. Sustainable Energy and Fuels, 2017, 1, 1023-1027.	2.5	49
38	Incorporation of TiB <sub>2</sub> additive into MnO <sub>2</sub> cathode and its influence on rechargeability in an aqueous battery system. Solid State Ionics, 2008, 179, 355-361.	1.3	48
39	Correlation among physical and electrochemical behaviour of nanostructured electrolytic manganese dioxide from leach liquor and synthetic for aqueous asymmetric capacitor. Physical Chemistry Chemical Physics, 2016, 18, 4711-4720.	1.3	48
40	Biochar increases soil organic carbon, avocado yields and economic return over 4 years of cultivation. Science of the Total Environment, 2020, 724, 138153.	3.9	46
41	Electrochemical characterization of an aqueous lithium rechargeable battery: The effect of CeO <sub>2</sub> additions to the MnO <sub>2</sub> cathode. Journal of Alloys and Compounds, 2009, 479, 87-90.	2.8	43
42	RDFTools: A software tool for quantifying short-range ordering in amorphous materials. Microscopy Research and Technique, 2012, 75, 153-163.	1.2	43
43	Contamination mitigation strategies for scanning transmission electron microscopy. Micron, 2015, 73, 36-46.	1.1	43
44	Nb-substitution and Cs <sup>+</sup> ion-exchange in the titanosilicate sitinakite. Microporous and Mesoporous Materials, 2002, 55, 1-13.	2.2	42
45	The influence of bismuth oxide doping on the rechargeability of aqueous cells using MnO <sub>2</sub> cathode and LiOH electrolyte. Electrochimica Acta, 2008, 53, 6323-6327.	2.6	42
46	Silicon as a ubiquitous contaminant in graphene derivatives with significant impact on device performance. Nature Communications, 2018, 9, 5070.	5.8	42
47	TEM and ellipsometry studies of nanolaminate oxide films prepared using atomic layer deposition. Applied Surface Science, 2005, 243, 265-277.	3.1	41
48	Synthesis-Dependent Surface Defects and Morphology of Hematite Nanoparticles and Their Effect on Cytotoxicity in Vitro. ACS Applied Materials & Interfaces, 2016, 8, 5867-5876.	4.0	41
49	Bio-waste chicken eggshells to store energy. Dalton Transactions, 2018, 47, 16828-16834.	1.6	40
50	Immobilization of heavy metals in contaminated soil after mining activity by using biochar and other industrial by-products: the significant role of minerals on the biochar surfaces. Environmental Technology (United Kingdom), 2019, 40, 3200-3215.	1.2	40
51	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. Nano Letters, 2021, 21, 3989-3996.	4.5	37
52	Characterisation of PI3 and RF plasma nitrided austenitic stainless steels using plan and cross-sectional TEM techniques. Surface and Coatings Technology, 2003, 165, 107-118.	2.2	36
53	Pyrolysis of attapulgite clay blended with yak dung enhances pasture growth and soil health: Characterization and initial field trials. Science of the Total Environment, 2017, 607-608, 184-194.	3.9	36
54	The Influence of Alkali Metal Polyphosphate on the Tribological Properties of Heavily Loaded Steel on Steel Contacts at Elevated Temperatures. Advanced Materials Interfaces, 2015, 2, 1500032.	1.9	34

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55	Determination of mean free path for energy loss and surface oxide film thickness using convergent beam electron diffraction and thickness mapping: a case study using Si and P91 steel. <i>Journal of Microscopy</i> , 2006, 224, 187-196.	0.8	33
56	A study of lithium insertion into MnO <sub>2</sub> containing TiS <sub>2</sub> additive a battery material in aqueous LiOH solution. <i>Electrochimica Acta</i> , 2007, 52, 7007-7013.	2.6	32
57	Construction of 2D lateral pseudoheterostructures by strain engineering. <i>2D Materials</i> , 2017, 4, 025102.	2.0	31
58	Caburisation of heat-resistant steels. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 1998, 49, 231-236.	0.8	30
59	Development of an ellipse fitting method with which to analyse selected area electron diffraction patterns. <i>Ultramicroscopy</i> , 2016, 160, 140-145.	0.8	30
60	Wheat straw vinegar: A more cost-effective solution than chemical fungicides for sustainable wheat plant protection. <i>Science of the Total Environment</i> , 2020, 725, 138359.	3.9	30
61	A quantitative X-ray diffraction and analytical electron microscopy study of service-exposed 2.25Cr-1Mo steels. <i>Materials Characterization</i> , 2001, 47, 17-26.	1.9	29
62	Influence of Si(100) surface pretreatment on the morphology of TiO <sub>2</sub> films grown by atomic layer deposition. <i>Thin Solid Films</i> , 2003, 440, 109-116.	0.8	29
63	A correlative approach to segmenting phases and ferrite morphologies in transformation-induced plasticity steel using electron back-scattering diffraction and energy dispersive X-ray spectroscopy. <i>Ultramicroscopy</i> , 2014, 147, 114-132.	0.8	29
64	Chemical nature of alkaline polyphosphate boundary film at heated rubbing surfaces. <i>Scientific Reports</i> , 2016, 6, 26008.	1.6	29
65	Noble Metal-Modified Porous Titania Networks and their Application as Photocatalysts. <i>ChemCatChem</i> , 2011, 3, 1763-1771.	1.8	28
66	Enhanced Photocatalytic Activity: Macroporous Electrospun Mats of Mesoporous Au/TiO <sub>2</sub> Nanofibers. <i>ChemCatChem</i> , 2013, 5, 2646-2654.	1.8	28
67	Thermoelectric performance of tellurium-reduced quaternary p-type lead chalcogenide composites. <i>Acta Materialia</i> , 2014, 80, 365-372.	3.8	28
68	Controlled delivery of drugs adsorbed onto porous Fe <sub>3</sub> O <sub>4</sub> structures by application of AC/DC magnetic fields. <i>Microporous and Mesoporous Materials</i> , 2016, 226, 243-250.	2.2	27
69	Mechanistic evaluation of biochar potential for plant growth promotion and alleviation of chromium-induced phytotoxicity in <i>Ficus elastica</i> . <i>Chemosphere</i> , 2020, 243, 125332.	4.2	27
70	A Hybrid Electrochemical Energy Storage Device Using Sustainable Electrode Materials. <i>ChemistrySelect</i> , 2020, 5, 1597-1606.	0.7	27
71	Hollow nitrogen-containing core/shell fibrous carbon nanomaterials as support to platinum nanocatalysts and their TEM tomography study. <i>Nanoscale Research Letters</i> , 2012, 7, 165.	3.1	26
72	Microstructural Characterization of P91 Steel in the Virgin, Service Exposed and Post-Service Re-Normalized Conditions. <i>Steel Research International</i> , 2013, 84, 1302-1308.	1.0	26

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73	Enhanced thermoelectric performance and mechanical strength of n-type BiTeSe materials produced via a composite strategy. <i>Chemical Engineering Journal</i> , 2022, 428, 131205.	6.6	26
74	Structural Evolution of Self-Assembling Nanohybrid Thin Films from Functionalized Urea Precursors. <i>Advanced Functional Materials</i> , 2007, 17, 3926-3932.	7.8	24
75	Microstructural and spectroscopic investigations into the effect of CeO <sub>2</sub> additions on the performance of a MnO <sub>2</sub> aqueous rechargeable battery. <i>Electrochimica Acta</i> , 2009, 54, 3244-3249.	2.6	24
76	Multifunctional Bi-Layered Tribofilm Generated on Steel Contact Interfaces under High-Temperature Melt Lubrication. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25092-25103.	1.5	24
77	Synthesis of mesoporous zirconium titanates using alkylcarboxylate surfactants and their transformation to dense ceramics. <i>Microporous and Mesoporous Materials</i> , 2007, 103, 123-133.	2.2	23
78	Higher Order Plasmonic Modes Excited in Ag Triangular Nanoplates by an Electron Beam. <i>Plasmonics</i> , 2016, 11, 1081-1086.	1.8	23
79	Effect of oxidizer in the synthesis of NiO anchored nanostructure nickel molybdate for sodium-ion battery. <i>Materials Today Energy</i> , 2018, 10, 1-14.	2.5	23
80	Unusual Competitive and Synergistic Effects of Graphite Nanoplates in Engine Oil on the Tribofilm Formation. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901081.	1.9	23
81	In-situ observation of nucleation, growth and interaction of deformation-induced $\langle \mathbf{110} \rangle$ martensite in metastable Ti-10V-2Fe-3Al. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 802, 140237.	2.6	23
82	Characterization of C54 titanium silicide thin films by spectroscopy, microscopy and diffraction. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 5213-5219.	1.3	22
83	Enhancing the Thermoelectric Performance of Polycrystalline SnSe by Decoupling Electrical and Thermal Transport through Carbon Fiber Incorporation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 12910-12918.	4.0	22
84	Manganese Dioxide Cathode in the Presence of TiS <sub>2</sub> as Additive on an Aqueous Lithium Secondary Cell. <i>Journal of the Electrochemical Society</i> , 2007, 154, A109.	1.3	21
85	The effect of molybdenum and aluminium additions on the carburization behaviour of high temperature steel. <i>Journal of Materials Science Letters</i> , 1993, 12, 1076-1079.	0.5	20
86	Carbon- and crack-free growth of hexagonal boron nitride nanosheets and their uncommon stacking order. <i>Nanoscale</i> , 2016, 8, 15926-15933.	2.8	20
87	Improvement in continuously variable crown work roll contour under CVC cyclical shifting mode. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 90, 2723-2731.	1.5	20
88	Hydrothermal crystallization of amorphous titania films deposited using low temperature atomic layer deposition. <i>Thin Solid Films</i> , 2008, 516, 8414-8423.	0.8	19
89	Novel synthesis of superparamagnetic Ni-Co-B nanoparticles and their effect on superconductor properties of MgB <sub>2</sub> . <i>Acta Materialia</i> , 2014, 70, 298-306.	3.8	19
90	Dispersion of Ni <sup>2+</sup> ions via acetate precursor in the preparation of NaNiPO <sub>4</sub> nanoparticles: effect of acetate vs. nitrate on the capacitive energy storage properties. <i>Dalton Transactions</i> , 2017, 46, 13704-13713.	1.6	19

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91	Atomic layer deposition of TiO <sub>2</sub> / Al <sub>2</sub> O <sub>3</sub> films for optical applications. , 2005, 5870, 76.		18
92	Advanced TEM specimen preparation methods for replication of P91 steel. Materials Characterization, 2006, 56, 49-58.	1.9	18
93	A Transmission Kikuchi Diffraction Study of a Cold-Rolled and Annealed Fe-17Mn-2Si-3Al-1Ni-0.06C wt% Steel. Steel Research International, 2015, 86, 1204-1214.	1.0	18
94	Tribochemistry of adaptive integrated interfaces at boundary lubricated contacts. Scientific Reports, 2017, 7, 9935.	1.6	18
95	Tunable solution-processable anodic exfoliated graphene. Applied Materials Today, 2019, 15, 290-296.	2.3	18
96	Transmission electron microscopy studies of HfO <sub>2</sub> thin films grown by chloride-based atomic layer deposition. Applied Surface Science, 2006, 253, 606-617.	3.1	17
97	TEM investigation of MnO <sub>2</sub> cathode containing TiS <sub>2</sub> and its influence in aqueous lithium secondary battery. Electrochimica Acta, 2007, 52, 3294-3298.	2.6	17
98	High-Index Core-Shell Ni-Pt Nanoparticles as Oxygen Reduction Electrocatalysts. ACS Applied Nano Materials, 2020, 3, 5718-5731.	2.4	17
99	Graphene inclusion induced ultralow thermal conductivity and improved figure of merit in p-type SnSe. Nanoscale, 2020, 12, 12760-12766.	2.8	16
100	Elemental distributions within multiphase quaternary Pb chalcogenide thermoelectric materials determined through three-dimensional atom probe tomography. Nano Energy, 2016, 26, 157-163.	8.2	15
101	Nature of magnetism in thiol-capped gold nanoparticles investigated with Muon spin rotation. Applied Physics Letters, 2018, 112, .	1.5	15
102	Oxidative and Frictional Behavior of a Binary Sodium Borate-Silicate Composite in High-Temperature Lubricant Applications. Industrial & Engineering Chemistry Research, 2020, 59, 2921-2933.	1.8	15
103	Low Temperature Bonding of Ceramics by Sol-Gel Processing. Journal of Sol-Gel Science and Technology, 2000, 19, 321-324.	1.1	14
104	Previous heat treatment inducing different plasma nitriding behaviors in martensitic stainless steels. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1795-1801.	0.9	14
105	Enhanced energy transfer in heterogeneous nanocrystals for near infrared upconversion photocurrent generation. Nanoscale, 2017, 9, 18661-18667.	2.8	14
106	Sol-gel bonding of silicon wafers. Thin Solid Films, 2005, 488, 153-159.	0.8	13
107	Solution-Grown Dendritic Pt-Based Ternary Nanostructures for Enhanced Oxygen Reduction Reaction Functionality. Nanomaterials, 2018, 8, 462.	1.9	13
108	Biochar-based fertiliser enhances nutrient uptake and transport in rice seedlings. Science of the Total Environment, 2022, 826, 154174.	3.9	13



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109	Microstructural evolution in seven 2.25Crâ€“1Mo superheater outlet headers resulting from service exposure. <i>Science and Technology of Welding and Joining</i> , 2001, 6, 168-176.	1.5	12
110	Characterisation of epitaxial TiO <sub>2</sub> thin films grown on MgO(001) using atomic layer deposition. <i>Journal of Crystal Growth</i> , 2005, 285, 208-214.	0.7	12
111	The friction and wear of thin titanium nitride and silicon nitride coatings on stainless steel at temperatures to 500 Â°C. <i>Surface and Coatings Technology</i> , 1992, 50, 151-160.	2.2	11
112	Optimisation of post-weld heat treatment of a 1.25Crâ€“0.5Mo pressure vessel for high temperature hydrogen service. <i>International Journal of Pressure Vessels and Piping</i> , 1999, 76, 259-266.	1.2	11
113	Temperature effect of nitrated stainless steel coatings deposited by reactive DC-magnetron sputtering. <i>Thin Solid Films</i> , 2004, 469-470, 167-172.	0.8	11
114	Effect of multi-layered bottom electrodes on the orientation of strontium-doped lead zirconate titanate thin films. <i>Thin Solid Films</i> , 2008, 516, 8101-8105.	0.8	11
115	Iron(III) accumulations in inland saline waterways, Hunter Valley, Australia: Mineralogy, micromorphology and pore-water geochemistry. <i>Applied Geochemistry</i> , 2009, 24, 1825-1834.	1.4	11
116	Evolution of the structure and magneto-optical properties of ion beam synthesized iron nanoclusters. <i>Journal of Materials Science</i> , 2012, 47, 1127-1134.	1.7	11
117	Probe current determination in analytical <sc>TEM/STEM</sc> and its application to the characterization of large area <sc>EDS</sc> detectors. <i>Microscopy Research and Technique</i> , 2015, 78, 886-893.	1.2	11
118	Mulliteâ€“glass and mulliteâ€“mullite interfaces: Analysis by molecular dynamics (<sc>MD</sc>) simulation and highâ€“resolution <sc>TEM</sc>. <i>Journal of the American Ceramic Society</i> , 2018, 101, 428-439.	1.9	11
119	The effect of Î²-phase condition on the tensile behaviour in a near-Î² Ti alloy produced by blended elemental powder metallurgy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 747, 232-243.	2.6	11
120	Topographical and compositional engineering of coreâ€“shell Ni@Pt ORR electro-catalysts. <i>RSC Advances</i> , 2020, 10, 29268-29277.	1.7	11
121	Thermoelectric performance of thermally aged nanostructured bulk materialsâ€“a case study of lead chalcogenides. <i>Materials Today Physics</i> , 2020, 13, 100190.	2.9	11
122	Tuning the electromechanical properties and polarization of Aluminium Nitride by ion beam-induced point defects. <i>Acta Materialia</i> , 2021, 203, 116495.	3.8	11
123	A transmission electron microscopy study of xenon bubbles in ion-implanted tin. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1990, 61, 531-542.	0.7	10
124	Plasmon imaging: An efficient TEM-based method for locating noble metal particles dispersed on oxide catalysts at very low densities. <i>Micron</i> , 2008, 39, 344-347.	1.1	10
125	Origin of resistivity anomaly in p-type leads chalcogenide multiphase compounds. <i>AIP Advances</i> , 2015, 5, 053601.	0.6	9
126	Fertilizing behavior of extract of organomineral-activated biochar: low-dose foliar application for promoting lettuce growth. <i>Chemical and Biological Technologies in Agriculture</i> , 2021, 8, .	1.9	9



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127	A kinetic and morphological study of the coking of some heat-resistant steels. <i>Journal of Materials Science</i> , 1994, 29, 4357-4370.	1.7	8
128	The oxidation of titanium nitride- and silicon nitride-coated stainless steel in carbon dioxide environments. <i>Corrosion Science</i> , 1992, 33, 1083-1098.	3.0	7
129	Sol-gel bonding of silicon wafers. <i>Thin Solid Films</i> , 2005, 488, 160-166.	0.8	7
130	Microstructural investigation of nickel silicide thin films and the silicide-silicon interface using transmission electron microscopy. <i>Micron</i> , 2009, 40, 11-14.	1.1	7
131	Microstructural and Compositional Analysis of Strontium-Doped Lead Zirconate Titanate Thin Films on Gold-Coated Silicon Substrates. <i>Microscopy and Microanalysis</i> , 2009, 15, 30-35.	0.2	7
132	Lattice Guiding for Low Temperature Crystallization of Rhombohedral Perovskite-Structured Oxide Thin Films. <i>Crystal Growth and Design</i> , 2010, 10, 761-764.	1.4	7
133	Intrinsic Effect of Nanoparticles on the Mechanical Rupture of Double-Shell Colloidal Capsule via In Situ TEM Mechanical Testing and STEM Interfacial Analysis. <i>Small</i> , 2020, 16, e2001978.	5.2	7
134	Advanced characterization of biomineralization at plaque layer and inside rice roots amended with iron- and silica-enhanced biochar. <i>Scientific Reports</i> , 2021, 11, 159.	1.6	7
135	Effect of strain on microstructural development during uniaxial compression of metastable beta Ti-10V-2Fe-3Al alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 804, 140720.	2.6	7
136	Some applications of analytical TEM to the characterisation of high temperature equipment. <i>Micron</i> , 2001, 32, 831-840.	1.1	6
137	MnO <sub>2</sub> cathode in an aqueous Li <sub>2</sub> SO <sub>4</sub> solution for battery applications. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 1-5.	1.5	6
138	Ionic interdiffusion as interaction mechanism between Al and Si <sub>3</sub> N <sub>4</sub> . <i>Journal of the American Ceramic Society</i> , 2019, 102, 4835-4847.	1.9	6
139	Creating thin magnetic layers at the surface of Sb <sub>2</sub> Te <sub>3</sub> topological insulators using a low-energy chromium ion beam. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	6
140	Investigating the cadmium adsorption capacities of crop straw biochars produced using various feedstocks and pyrolysis temperatures. <i>Environmental Science and Pollution Research</i> , 2021, 28, 21516-21527.	2.7	6
141	A TEM investigation of solid krypton bubbles formed in cobalt by ion implantation. <i>Radiation Effects and Defects in Solids</i> , 1990, 114, 253-261.	0.4	5
142	Synthesis of Self-Assembled Island-Structured Complex Oxide Dielectric Films. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16610-16614.	1.5	5
143	Giant Piezoelectricity of Deformed Aluminum Nitride Stabilized through Noble Gas Interstitials for Energy Efficient Resonators. <i>Advanced Electronic Materials</i> , 2021, 7, 2100358.	2.6	5
144	A TEM and EDX study of cavities formed in tin by xenon ion implantation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1990, 52, 160-169.	0.6	4

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145	A transmission electron microscopy study of the effect of the $\beta$ phase transformation of tin on xenon bubbles formed by ion implantation. <i>Journal of Materials Science Letters</i> , 1991, 10, 905-907.	0.5	4
146	The influence of load and counterface on the effectiveness of thin physically vapour deposited titanium nitride coatings in providing wear resistance at temperatures to 500 Å°C. <i>Wear</i> , 1992, 155, 207-223.	1.5	4
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