Dalaver H Anjum

List of Publications by Citations

226 papers	10,032 citations	49 h-index	95 g-index
240 ext. papers	11,905 ext. citations	7.2 avg, IF	6.53 L-index

#	Paper	IF	Citations
226	Plasma-Assisted Synthesis of NiCoP for Efficient Overall Water Splitting. *Nano Letters*, **2016**, 16, 7718-7725	12.5	812
225	Effect of Postetch Annealing Gas Composition on the Structural and Electrochemical Properties of Ti2CTx MXene Electrodes for Supercapacitor Applications. *Chemistry of Materials*, **2015**, 27, 5314-5323	9.6	535
224	Amorphous NiFe-OH/NiFeP Electrocatalyst Fabricated at Low Temperature for Water Oxidation Applications. *ACS Energy Letters*, **2017**, 2, 1035-1042	20.1	369
223	A highly selective copper-indium bimetallic electrocatalyst for the electrochemical reduction of aqueous CO2 to CO. *Angewandte Chemie - International Edition*, **2015**, 54, 2146-50	16.4	338
222	Polyglutamine disruption of the huntingtin exon 1 N terminus triggers a complex aggregation mechanism. *Nature Structural and Molecular Biology*, **2009**, 16, 380-9	17.6	336
221	MXenes stretch hydrogel sensor performance to new limits. *Science Advances*, **2018**, 4, eaat0098	14.3	334
220	Atomic layer deposition of SnO2 on MXene for Li-ion battery anodes. *Nano Energy*, **2017**, 34, 249-256	17.1	307
219	H2O2 assisted room temperature oxidation of Ti2C MXene for Li-ion battery anodes. *Nanoscale*, **2016**, 8, 7580-7	7.7	287
218	Direct Chemical Synthesis of MnO2 Nanowhiskers on Transition-Metal Carbide Surfaces for Supercapacitor Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 18806-14	9.5	256
217	Aqueous Zinc-Ion Storage in MoS by Tuning the Intercalation Energy. *Nano Letters*, **2019**, 19, 3199-3206	11.5	223
216	Ultraporous Films with Uniform Nanochannels by Block Copolymer Micelles Assembly. *Macromolecules*, **2010**, 43, 8079-8085	5.5	182
215	Enhanced photocatalytic hydrogen evolution from organic semiconductor heterojunction nanoparticles. *Nature Materials*, **2020**, 19, 559-565	27	171
214	Nanostructured cobalt sulfide-on-fiber with tunable morphology as electrodes for asymmetric hybrid supercapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 16190-16198	13	161
213	The structure and binding mode of citrate in the stabilization of gold nanoparticles. *Nature Chemistry*, **2017**, 9, 890-895	17.6	158
212	Spin-cast bulk heterojunction solar cells: a dynamical investigation. *Advanced Materials*, **2013**, 25, 1923-924		154
211	The temperature-dependent microstructure of PEDOT/PSS films: insights from morphological, mechanical and electrical analyses. *Journal of Materials Chemistry C*, **2014**, 2, 9903-9910	7.1	140
210	Polymer Solar Cells with Efficiency >10% Enabled via a Facile Solution-Processed Al-Doped ZnO Electron Transporting Layer. *Advanced Energy Materials*, **2015**, 5, 1500204	21.8	132

209	Hollow Au@Pd and Au@Pt core–shell nanoparticles as electrocatalysts for ethanol oxidation reactions. *Journal of Materials Chemistry*, **2012**, 22, 25003		126
208	Phosphine plasma activation of α-Fe2O3 for high energy asymmetric supercapacitors. *Nano Energy*, **2018**, 49, 155-162	17.1	123
207	Sn surface-enriched Pt–Sn bimetallic nanoparticles as a selective and stable catalyst for propane dehydrogenation. *Journal of Catalysis*, **2014**, 320, 52-62	7.3	116
206	Molybdenum carbide–carbon nanocomposites synthesized from a reactive template for electrochemical hydrogen evolution. *Journal of Materials Chemistry A*, **2014**, 2, 10548-10556	13	114
205	Dendritic Tip-on Polytriazine-Based Carbon Nitride Photocatalyst with High Hydrogen Evolution Activity. *Chemistry of Materials*, **2015**, 27, 8237-8247	9.6	108
204	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. *Nature Materials*, **2021**, 20, 378-384	27	108
203	Efficient inverted bulk-heterojunction solar cells from low-temperature processing of amorphous ZnO buffer layers. *Journal of Materials Chemistry A*, **2014**, 2, 13321	13	101
202	Semi-metallic, strong and stretchable wet-spun conjugated polymer microfibers. *Journal of Materials Chemistry C*, **2015**, 3, 2528-2538	7.1	100
201	Surface Passivation of MoO3 Nanorods by Atomic Layer Deposition toward High Rate Durable Li Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 13154-63	9.5	91
200	An Oxygen-Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenum-Based Layer for Overall Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 5780-5784	16.4	89
199	A novel strategy for the synthesis of highly stable ternary SiOx composites for Li-ion-battery anodes. *Journal of Materials Chemistry A*, **2019**, 7, 15969-15974	13	89
198	The Effect of Residual Palladium Catalyst Contamination on the Photocatalytic Hydrogen Evolution Activity of Conjugated Polymers. *Advanced Energy Materials*, **2018**, 8, 1802181	21.8	89
197	NiVMO (M = Sn, Ti, W) Catalysts Prepared by a Dry Mixing Method for Oxidative Dehydrogenation of Ethane. *ACS Catalysis*, **2016**, 6, 2852-2866	13.1	88
196	Hydrogen production by tuning the photonic band gap with the electronic band gap of TiO2 *Scientific Reports*, **2013**, 3, 2849	4.9	86
195	Edge stabilization in reduced-dimensional perovskites. *Nature Communications*, **2020**, 11, 170	17.4	79
194	Coexistence of plasmonic and magnetic properties in Au89Fe11 nanoalloys. *Nanoscale*, **2013**, 5, 5611-9	7.7	77
193	Nb effect in the nickel oxide-catalyzed low-temperature oxidative dehydrogenation of ethane. *Journal of Catalysis*, **2012**, 285, 292-303	7.3	74
192	Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. *Advanced Energy Materials*, **2018**, 8, 1801001	21.8	72

191	Biodegradable Magnetic Silica@Iron Oxide Nanovectors with Ultra-Large Mesopores for High Protein Loading, Magnetothermal Release, and Delivery. *Journal of Controlled Release*, **2017**, 259, 187-194	11.7	69
190	Controlled Surface Segregation Leads to Efficient Coke-Resistant Nickel/Platinum Bimetallic Catalysts for the Dry Reforming of Methane. *ChemCatChem*, **2015**, 7, 819-829	5.2	68
189	Mechanistic Insight into the Stability of HfO2 -Coated MoS2 Nanosheet Anodes for Sodium Ion Batteries. *Small*, **2015**, 11, 4341-50	11	67
188	Biodegradable Oxamide-Phenylene-Based Mesoporous Organosilica Nanoparticles with Unprecedented Drug Payloads for Delivery in Cells. *Chemistry - A European Journal*, **2016**, 22, 14806-14811	4.8	67
187	A scalable synthesis of highly stable and water dispersible Ag44(SR)30 nanoclusters. *Journal of Materials Chemistry A*, **2013**, 1, 10148	13	66
186	Surface-Bound Ligands Modulate Chemoselectivity and Activity of a Bimetallic Nanoparticle Catalyst. *ACS Catalysis*, **2015**, 5, 2529-2533	13.1	64
185	Ni-Sn-Supported ZrO Catalysts Modified by Indium for Selective CO Hydrogenation to Methanol. *ACS Omega*, **2018**, 3, 3688-3701	3.9	64
184	Contact-Induced Nucleation in High-Performance Bottom-Contact Organic Thin Film Transistors Manufactured by Large-Area Compatible Solution Processing. *Advanced Functional Materials*, **2016**, 26, 2371-2378	15.6	60
183	Dual-template engineering of triple-layered nanoarray electrode of metal chalcogenides sandwiched with hydrogen-substituted graphdiyne. *Nature Communications*, **2018**, 9, 3132	17.4	60
182	Synthesis of tantalum carbide and nitride nanoparticles using a reactive mesoporous template for electrochemical hydrogen evolution. *Journal of Materials Chemistry A*, **2013**, 1, 12606	13	60
181	Enzymatically degradable hybrid organic-inorganic bridged silsesquioxane nanoparticles for in vitro imaging. *Nanoscale*, **2015**, 7, 15046-50	7.7	58
180	Photocatalysis with chromium-doped TiO2: bulk and surface doping. *ChemSusChem*, **2014**, 7, 1361-71	8.3	56
179	Droop-free AlxGa1-xN/AlyGa1-yN quantum-disks-in-nanowires ultraviolet LED emitting at 337 nm on metal/silicon substrates. *Optics Express*, **2017**, 25, 1381-1390	3.3	54
178	Determination of band offsets at GaN/single-layer MoS2 heterojunction. *Applied Physics Letters*, **2016**, 109, 032104	3.4	52
177	NiTaO mixed oxide catalysts for the low temperature oxidative dehydrogenation of ethane to ethylene. *Journal of Catalysis*, **2015**, 329, 291-306	7.3	49
176	Addition of the Lewis Acid Zn(C F) Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm V s. *Advanced Materials*, **2019**, 31, e1900871	24	48
175	Effect of hydrofluoric acid concentration on the evolution of photoluminescence characteristics in porous silicon nanowires prepared by Ag-assisted electroless etching method. *Journal of Applied Physics*, **2012**, 112, 033502	2.5	48
174	Band Alignment at GaN/Single-Layer WSe Interface. *ACS Applied Materials & Interfaces*, **2017**, 9, 9110-9117	9.5	47

173	Liquid phase exfoliation of MoS2 and WS2 in aqueous ammonia and their application in highly efficient organic solar cells. *Journal of Materials Chemistry C*, **2020**, 8, 5259-5264	7.1	46
172	Gold Nanoparticles Supported on Fibrous Silica Nanospheres (KCC-1) as Efficient Heterogeneous Catalysts for CO Oxidation. *ChemCatChem*, **2016**, 8, 1671-1678	5.2	45
171	Reactive surface organometallic complexes observed using dynamic nuclear polarization surface enhanced NMR spectroscopy. *Chemical Science*, **2017**, 8, 284-290	9.4	44
170	Synergetic Effects Leading to Coke-Resistant NiCo Bimetallic Catalysts for Dry Reforming of Methane. *ChemCatChem*, **2015**, 7, 427-433	5.2	44
169	Tailoring ruthenium exposure to enhance the performance of fcc platinum@ruthenium core-shell electrocatalysts in the oxygen evolution reaction. *Physical Chemistry Chemical Physics*, **2016**, 18, 16169-78	3.6	44
168	Evaluating the potential of superhydrophobic nanoporous alumina membranes for direct contact membrane distillation. *Journal of Colloid and Interface Science*, **2019**, 533, 723-732	9.3	42
167	Engineering Hydrophobic Organosilica Nanoparticle-Doped Nanofibers for Enhanced and Fouling Resistant Membrane Distillation. *ACS Applied Materials & Interfaces*, **2017**, 9, 1737-1745	9.5	41
166	Green synthesis of Ni-Nb oxide catalysts for low-temperature oxidative dehydrogenation of ethane. *ChemSusChem*, **2015**, 8, 1254-63	8.3	41
165	Porous Porphyrin-Based Organosilica Nanoparticles for NIR Two-Photon Photodynamic Therapy and Gene Delivery in Zebrafish. *Advanced Functional Materials*, **2018**, 28, 1800235	15.6	41
164	Unraveling the Order and Disorder in Poly(3,4-ethylenedioxythiophene)/Poly(styrenesulfonate) Nanofilms. *Macromolecules*, **2015**, 48, 5688-5696	5.5	40
163	Photoresponsive Bridged Silsesquioxane Nanoparticles with Tunable Morphology for Light-Triggered Plasmid DNA Delivery. *ACS Applied Materials & Interfaces*, **2015**, 7, 24993-7	9.5	40
162	Mesoporous Reduced Graphene Oxide as a High Capacity Cathode for Aluminum Batteries. *Small*, **2018**, 14, e1803584	11	39
161	Periodic Mesoporous Organosilica Nanoparticles with Controlled Morphologies and High Drug/Dye Loadings for Multicargo Delivery in Cancer Cells. *Chemistry - A European Journal*, **2016**, 22, 9607-15	4.8	38
160	Microwave-synthesized tin oxide nanocrystals for low-temperature solution-processed planar junction organo-halide perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 7759-7763	13	37
159	Cobalt and sulfur co-doped nano-size TiO2 for photodegradation of various dyes and phenol. *Journal of Environmental Sciences*, **2015**, 37, 100-9	6.4	37
158	Effect of rapid thermal annealing on strain in ultrathin strained silicon on insulator layers. *Applied Physics Letters*, **2003**, 83, 875-877	3.4	37
157	GaN/AlGaN multiple quantum wells grown on transparent and conductive (-201)-oriented β-Ga2O3 substrate for UV vertical light emitting devices. *Applied Physics Letters*, **2018**, 113, 082102	3.4	36
156	Revealing a room temperature ferromagnetism in cadmium oxide nanoparticles: an experimental and first-principles study. *RSC Advances*, **2015**, 5, 33233-33238	3.7	35

155	Effects of oxidizing medium on the composition, morphology and optical properties of copper oxide nanoparticles produced by pulsed laser ablation. *Applied Surface Science*, **2013**, 286, 149-155	6.7	35
154	Kinetics on NiZn Bimetallic Catalysts for Hydrogen Evolution via Selective Dehydrogenation of Methylcyclohexane to Toluene. *ACS Catalysis*, **2017**, 7, 1592-1600	13.1	34
153	Impact of N-plasma and Ga-irradiation on MoS2 layer in molecular beam epitaxy. *Applied Physics Letters*, **2017**, 110, 012101	3.4	34
152	Flux-assisted synthesis of SnNb2O6 for tuning photocatalytic properties. *Physical Chemistry Chemical Physics*, **2014**, 16, 10762-9	3.6	34
151	Effect of Precursor Ligands and Oxidation State in the Synthesis of Bimetallic Nano-Alloys. *Chemistry of Materials*, **2015**, 27, 4134-4141	9.6	34
150	Highly stable thin film transistors using multilayer channel structure. *Applied Physics Letters*, **2015**, 106, 103505	3.4	33
149	Porous carbon as electrode material in direct ethanol fuel cells (DEFCs) synthesized by the direct carbonization of MOF-5. *Journal of Solid State Electrochemistry*, **2014**, 18, 1545-1555	2.6	33
148	Electronic structure and photocatalytic activity of wurtzite CuGaS nanocrystals and their Zn substitution. *Journal of Materials Chemistry A*, **2015**, 3, 8896-8904	13	32
147	Electrochemical Characteristics and Li+ Ion Intercalation Kinetics of Dual-Phase Li4Ti5O12/Li2TiO3 Composite in the Voltage Range 0 V. *Journal of Physical Chemistry C*, **2016**, 120, 9553-9561	3.8	32
146	Tunable Nanocarrier Morphologies from Glycopolypeptide-Based Amphiphilic Biocompatible Star Copolymers and Their Carbohydrate Specific Intracellular Delivery. *Biomacromolecules*, **2016**, 17, 466-75	6.9	31
145	Synthesis and photocatalytic activity of mesoporous nanocrystalline Fe-doped titanium dioxide. *Catalysis Today*, **2014**, 230, 158-165	5.3	31
144	Bipodal surface organometallic complexes with surface N-donor ligands and application to the catalytic cleavage of C-H and C-C bonds in n-butane. *Journal of the American Chemical Society*, **2013**, 135, 17943-51	16.4	31
143	On the phenomenon of large photoluminescence red shift in GaN nanoparticles. *Nanoscale Research Letters*, **2013**, 8, 342	5	31
142	Synthesis of Copper Hydroxide Branched Nanocages and Their Transformation to Copper Oxide. *Journal of Physical Chemistry C*, **2014**, 118, 19374-19379	3.8	30
141	Size- and shape-controlled synthesis of hexagonal bipyramidal crystals and hollow self-assembled Al-MOF spheres. *ChemSusChem*, **2014**, 7, 529-35	8.3	30
140	Defects induced luminescence and tuning of bandgap energy narrowing in ZnO nanoparticles doped with Li ions. *Journal of Applied Physics*, **2014**, 116, 083510	2.5	29
139	Self-planarized quantum-disks-in-nanowires ultraviolet-B emitters utilizing pendeo-epitaxy. *Nanoscale*, **2017**, 9, 7805-7813	7.7	28
138	Multiple-diffusion flame synthesis of pure anatase and carbon-coated titanium dioxide nanoparticles. *Combustion and Flame*, **2013**, 160, 1848-1856	5.3	28

137	Inherent electrochemistry and charge transfer properties of few-layered two-dimensional TiCT MXene. *Nanoscale*, **2018**, 10, 17030-17037	7.7	28
136	VOx/SiO2 Catalyst Prepared by Grafting VOCl3 on Silica for Oxidative Dehydrogenation of Propane. *ChemCatChem*, **2015**, 7, 3332-3339	5.2	27
135	Synthesis of Cu/Cu2O nanoparticles by laser ablation in deionized water and their annealing transformation into CuO nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 5759-66	1.3	26
134	Solution-processable MoOx nanocrystals enable highly efficient reflective and semitransparent polymer solar cells. *Nano Energy*, **2016**, 28, 277-287	17.1	23
133	A facile and novel approach towards carboxylic acid functionalization of multiwalled carbon nanotubes and efficient water dispersion. *Materials Letters*, **2013**, 108, 253-256	3.3	23
132	Tunable Selectivity for Electrochemical CO2 Reduction by Bimetallic CuSn Catalysts: Elucidating the Roles of Cu and Sn. *ACS Catalysis*, **2021**, 11, 11103-11108	13.1	23
131	Type-I band alignment at MoS2/In0.15Al0.85N lattice matched heterojunction and realization of MoS2 quantum well. *Applied Physics Letters*, **2017**, 111, 092104	3.4	22
130	Surface Composition of Silver Nanocubes and Their Influence on Morphological Stabilization and Catalytic Performance in Ethylene Epoxidation. *ACS Applied Materials & Interfaces*, **2015**, 7, 28576-84	9.5	22
129	TiO-supported Pt single atoms by surface organometallic chemistry for photocatalytic hydrogen evolution. *Physical Chemistry Chemical Physics*, **2019**, 21, 24429-24440	3.6	22
128	True Yellow Light-Emitting Diodes as Phosphor for Tunable Color-Rendering Index Laser-Based White Light. *ACS Photonics*, **2016**, 3, 2089-2095	6.3	21
127	Highly uniform ultraviolet-A quantum-confined AlGaN nanowire LEDs on metal/silicon with a TaN interlayer. *Optical Materials Express*, **2017**, 7, 4214	2.6	21
126	Design Aspects of Doped CeO for Low-Temperature Catalytic CO Oxidation: Transient Kinetics and DFT Approach. *ACS Applied Materials & Interfaces*, **2021**, 13, 22391-22415	9.5	21
125	Thin porphyrin composite membranes with enhanced organic solvent transport. *Journal of Membrane Science*, **2018**, 563, 684-693	9.6	19
124	Selective Adsorption of Volatile Hydrocarbons and Gases in High Surface Area Chalcogels Containing [ES3]3□Anions (E = As, Sb). *Chemistry of Materials*, **2014**, 26, 6454-6460	9.6	19
123	Hydrogen Production on Ag-Pd/TiO2 Bimetallic Catalysts: Is there a Combined Effect of Surface Plasmon Resonance with Schottky Mechanism on the Photo-Catalytic Activity?. *ChemistrySelect*, **2017**, 2, 2754-2762	1.8	17
122	Colloidal Sb2S3 nanocrystals: synthesis, characterization and fabrication of solid-state semiconductor sensitized solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 6809-6814	13	17
121	Tethering metal ions to photocatalyst particulate surfaces by bifunctional molecular linkers for efficient hydrogen evolution. *ChemSusChem*, **2014**, 7, 2575-83	8.3	17
120	Impact of ion implantation damage and thermal budget on mobility enhancement in strained-Si N-channel MOSFETs. *IEEE Transactions on Electron Devices*, **2004**, 51, 2136-2144	2.9	17

119	Observation of piezotronic and piezo-phototronic effects in n-InGaN nanowires/Ti grown by molecular beam epitaxy. *Nano Energy*, **2018**, 54, 264-271	17.1	17
118	Morphology control of anatase TiO for well-defined surface chemistry. *Physical Chemistry Chemical Physics*, **2018**, 20, 14362-14373	3.6	17
117	Trapping shape-controlled nanoparticle nucleation and growth stages via continuous-flow chemistry. *Chemical Communications*, **2017**, 53, 2495-2498	5.8	16
116	Rapid Size-Based Protein Discrimination inside Hybrid Isoporous Membranes. *ACS Applied Materials & Interfaces*, **2019**, 11, 8507-8516	9.5	16
115	Synthesis, characterization and visible light photocatalytic activity of Cr3+, Ce3+ and N co-doped TiO2 for the degradation of humic acid. *RSC Advances*, **2015**, 5, 32323-32332	3.7	16
114	An evaluation of microwave-assisted fusion and microwave-assisted acid digestion methods for determining elemental impurities in carbon nanostructures using inductively coupled plasma optical emission spectrometry. *Talanta*, **2016**, 148, 94-100	6.2	16
113	Nano-sized quaternary CuGa2In3S8 as an efficient photocatalyst for solar hydrogen production. *ChemSusChem*, **2014**, 7, 3112-21	8.3	16
112	Synthesis, optical properties and residual strain effect of GaN nanowires generated via metal-assisted photochemical electroless etching. *RSC Advances*, **2017**, 7, 21697-21702	3.7	15
111	Synthesis and Characterization of Branched fcc/hcp Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. *Crystal Growth and Design*, **2018**, 18, 1509-1516	3.5	15
110	Electrodeposited Ultrafine TaOx/CB Catalysts for PEFC Cathode Application: Their Oxygen Reduction Reaction Kinetics. *Electrochimica Acta*, **2014**, 149, 76-85	6.7	15
109	Room temperature p-type conductivity and coexistence of ferroelectric order in ferromagnetic Li doped ZnO nanoparticles. *Journal of Applied Physics*, **2014**, 116, 164109	2.5	15
108	Effect of surface structure on the catalytic behavior of Ni:Cu/Al and Ni:Cu:K/Al catalysts for methane decomposition. *Journal of Natural Gas Chemistry*, **2008**, 17, 374-382		14
107	Impact of p-type doping on charge transport in blade-coated small-molecule:polymer blend transistors. *Journal of Materials Chemistry C*, **2020**, 8, 15368-15376	7.1	14
106	Bandgap measurements and the peculiar splitting of E2H phonon modes of InxAl1-xN nanowires grown by plasma assisted molecular beam epitaxy. *Journal of Applied Physics*, **2016**, 120, 045701	2.5	14
105	L1 ordering and Ω precipitation in Al-Cu-Li. *Scientific Reports*, **2017**, 7, 3254	4.9	13
104	Nano-design of quantum dot-based photocatalysts for hydrogen generation using advanced surface molecular chemistry. *Physical Chemistry Chemical Physics*, **2015**, 17, 1001-9	3.6	12
103	From porous gold nanocups to porous nanospheres and solid particles--a new synthetic approach. *Journal of Colloid and Interface Science*, **2015**, 446, 59-66	9.3	12
102	Shape-controlled synthesis of Au@Pd core-shell nanoparticles and their corresponding electrochemical properties. *RSC Advances*, **2012**, 2, 3621	3.7	12

101	Impact of Pore-Walls Ligand Assembly on the Biodegradation of Mesoporous Organosilica Nanoparticles for Controlled Drug Delivery. *ACS Omega*, **2018**, 3, 5195-5201	3.9	12
100	Nanoscale stress analysis of strained-Si metal-oxide-semiconductor field-effect transistors by quantitative electron diffraction contrast imaging. *Applied Physics Letters*, **2005**, 87, 222111	3.4	11
99	Plasmon Resonance Enhanced Photocatalysis Under Visible Light with Au/Cu□iO2 Nanoparticles: Removal Cr (VI) from Water as a Case of Study. *Science of Advanced Materials*, **2013**, 5, 2007-2014	2.3	11
98	On the optical and microstrain analysis of graded InGaN/GaN MQWs based on plasma assisted molecular beam epitaxy. *Optical Materials Express*, **2016**, 6, 2052	2.6	11
97	Tungsten(VI) Carbyne/Bis(carbene) Tautomerization Enabled by N-Donor SBA15 Surface Ligands: A Solid-State NMR and DFT Study. *Angewandte Chemie - International Edition*, **2016**, 55, 11162-6	16.4	11
96	Exploiting the interactions between the ruthenium Hoveyda-Grubbs catalyst and Al-modified mesoporous silica: the case of SBA15 KCC-1. *Chemical Science*, **2018**, 9, 3531-3537	9.4	10
95	Synthesis of TiO2 nanoparticles containing Fe, Si, and V using multiple diffusion flames and catalytic oxidation capability of carbon-coated nanoparticles. *Journal of Nanoparticle Research*, **2016**, 18, 1	2.3	10
94	Well-defined mono(□3)-allyl)nickel complex ?MONi(□3)-C3H5) (M = Si or Al) grafted onto silica or alumina: a molecularly dispersed nickel precursor for syntheses of supported small size nickel nanoparticles. *Chemical Communications*, **2014**, 50, 7716-9	5.8	10
93	One-Pot Synthesis of Size- and Composition-Controlled Ni-Rich NiPt Alloy Nanoparticles in a Reverse Microemulsion System and Their Application. *ACS Applied Materials & Interfaces*, **2017**, 9, 30643-30653	9.5	10
92	Electron irradiation induced reduction of the permittivity in chalcogenide glass (As2S3) thin film. *Journal of Applied Physics*, **2013**, 113, 044116	2.5	10
91	Nanostructural Disorder and Reactivity Comparison of Flame Soot and Engine Soot Using Diesel and Jatropha Biodiesel/Diesel Blend as Fuels. *Energy & Fuels*, **2020**, 34, 12960-12971	4.1	10
90	Impacts of doping on epitaxial germanium thin film quality and Si-Ge interdiffusion. *Optical Materials Express*, **2018**, 8, 1117	2.6	9
89	Investigating the growth mechanism and optical properties of carbon-coated titanium dioxide nanoparticles. *Materials Letters*, **2013**, 108, 134-138	3.3	9
88	Synthesis of visible light driven cobalt tailored Ag2O/TiON nanophotocatalyst by reverse micelle processing for degradation of Eriochrome Black T. *Materials Research Bulletin*, **2013**, 48, 705-714	5.1	9
87	First demonstration of InGaP/InAlGaP based orange laser emitting at 608´nm. *Electronics Letters*, **2015**, 51, 1102-1104	1.1	8
86	Curved wall-jet burner for synthesizing titania and silica nanoparticles. *Proceedings of the Combustion Institute*, **2015**, 35, 2267-2274	5.9	8
85	In vivo evaluation of the biodistribution of intravenously administered naked and functionalised silver nanoparticles in rabbit. *IET Nanobiotechnology*, **2015**, 9, 368-74	2	7
84	Understanding of the structure activity relationship of PtPd bimetallic catalysts prepared by surface organometallic chemistry and ion exchange during the reaction of iso-butane with hydrogen. *Journal of Catalysis*, **2018**, 363, 34-51	7.3	7

83	Revealing microstructure and dislocation behavior in BAlN/AlGaN heterostructures. *Applied Physics Express*, **2018**, 11, 011001	2.4	7
82	Synthesis of SiOC:H nanoparticles by electrical discharge in hexamethyldisilazane and water. *Plasma Processes and Polymers*, **2017**, 14, 1700089	3.4	7
81	Synthesis and Characterization of Iron-Doped TiO2 Nanoparticles Using Ferrocene from Flame Spray Pyrolysis. *Catalysts*, **2021**, 11, 438	4	7
80	Characterization of nanomaterials with transmission electron microscopy. *IOP Conference Series: Materials Science and Engineering*, **2016**, 146, 012001	0.4	7
79	Generation and Characteristics of IV–VI transition Metal Nitride and Carbide Nanoparticles using a Reactive Mesoporous Carbon Nitride. *ChemistrySelect*, **2016**, 1, 290-296	1.8	7
78	Radiation stability and photothermal performance of surface-functionalized plasmonic nanofluids for direct-absorption solar applications. *Solar Energy Materials and Solar Cells*, **2021**, 227, 111115	6.4	7
77	3D flower like δMnO2/MXene Nano-hybrids for the removal of hexavalent Cr from wastewater. *Ceramics International*, **2021**, 47, 25951-25958	5.1	7
76	Spark Plasma Sintering (SPS)-Assisted Synthesis and Thermoelectric Characterization of Magnéli Phase VO. *Inorganic Chemistry*, **2018**, 57, 1259-1268	5.1	6
75	Cryo-transmission electron microscopy of Ag nanoparticles grown on an ionic liquid substrate. *Journal of Materials Research*, **2010**, 25, 1264-1271	2.5	6
74	Fabrication-tolerant and CMOS-compatible polarization splitter and rotator based on a compact bent-tapered directional coupler. *AIP Advances*, **2020**, 10, 125214	1.5	6
73	Ni2P Nanoparticles Embedded in Mesoporous SiO2 for Catalytic Hydrogenation of SO2 to Elemental S. *ACS Applied Nano Materials*, **2021**, 4, 5665-5676	5.6	6
72	Large bandgap blueshifts in the InGaP/InAlGaP laser structure using novel strain-induced quantum well intermixing. *Journal of Applied Physics*, **2016**, 119, 135703	2.5	6
71	Green chemistry based fabrication of holey graphene electrodes for high-performance supercapacitors. *Materials Letters*, **2020**, 271, 127793	3.3	5
70	Study of Si-Ge interdiffusion with phosphorus doping. *Journal of Applied Physics*, **2016**, 120, 165108	2.5	5
69	A Rapid and Cost-Effective Laser Based Synthesis of High Purity Cadmium Selenide Quantum Dots. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 867-72	1.3	5
68	**2013**,		5
67	A general approach for the synthesis of bimetallic MSn (M = Ru, Rh and Ir) catalysts for efficient hydrogenolysis of ester. *Catalysis Science and Technology*, **2017**, 7, 581-586	5.5	5
66	Thermal conductivity and nanocrystalline structure of platinum deposited by focused ion beam. *Nanotechnology*, **2015**, 26, 085704	3.4	5

65	Titanium Carbide MXene Nucleation Layer for Epitaxial Growth of High-Quality GaN Nanowires on Amorphous Substrates. *ACS Nano*, **2020**, 14, 2202-2211	16.7	5
64	Transmission electron microscopy of carbon-coated and iron-doped titania nanoparticles. *Nanotechnology*, **2016**, 27, 365709	3.4	5
63	Precise Control of Pt Particle Size for Surface Structure–Reaction Activity Relationship. *Journal of Physical Chemistry C*, **2018**, 122, 23451-23459	3.8	5
62	Polypropylene/phosphazene nanotube nanocomposites: Thermal, mechanical, and flame retardation studies. *Journal of Applied Polymer Science*, **2020**, 137, 49525	2.9	4
61	Ligand-free gold nanoclusters confined in mesoporous silica nanoparticles for styrene epoxidation. *Nanoscale Advances*, **2020**, 2, 1437-1442	5.1	4
60	First demonstration of orange-yellow light emitter devices in InGaP/InAlGaP laser structure using strain-induced quantum well intermixing technique **2016**,		4
59	Structural changes of electron and ion beam-deposited contacts in annealed carbon-based electrical devices. *Nanotechnology*, **2015**, 26, 445301	3.4	4
58	Harnessing the Extracellular Electron Transfer Capability of Geobacter sulfurreducens for Ambient Synthesis of Stable Bifunctional Single-Atom Electrocatalyst for Water Splitting. *Advanced Functional Materials*, **2021**, 31, 2010916	15.6	4
57	Nickel Phosphide Nanoparticles for Selective Hydrogenation of SO2 to H2S. *ACS Applied Nano Materials*, **2021**, 4, 6568-6582	5.6	4
56	Effect of Ionic Liquid (emim BF4) on the Dispersion of Gold Nanoparticles. *Journal of Physics: Conference Series*, **2016**, 758, 012020	0.3	4
55	Solvent-Free Synthesis of Quaternary Metal Sulfide Nanoparticles Derived from Thiourea. *Particle and Particle Systems Characterization*, **2018**, 35, 1700183	3.1	4
54	Health-friendly high-quality white light using violet-green-red laser and InGaN nanowires-based true yellow nanowires light-emitting diodes **2017**,		3
53	Optimization of Specimen Preparation Methods for Cryo Electron Microscopy of Oil-and-Water Emulsions. *Microscopy and Microanalysis*, **2019**, 25, 2428-2429	0.5	3
52	Transmission Electron Microscopy of Two-Dimensional MXene Sheets. *Microscopy and Microanalysis* , **2018**, 24, 1608-1609	0.5	3
51	Photodynamic Therapy: Porous Porphyrin-Based Organosilica Nanoparticles for NIR Two-Photon Photodynamic Therapy and Gene Delivery in Zebrafish (Adv. Funct. Mater. 21/2018). *Advanced Functional Materials*, **2018**, 28, 1870143	15.6	3
50	Cross-sectional analysis of fouled SWRO membranes by STEM-EDS. *Desalination*, **2014**, 333, 118-125	10.3	3
49	Spatially resolved investigation of competing nanocluster emission in quantum-disks-in-nanowires structure characterized by nanoscale cathodoluminescence. *Journal of Nanophotonics*, **2017**, 11, 026015	1.1	3
48	Experiments and Modeling of Si-Ge Interdiffusion with Partial Strain Relaxation in Epitaxial SiGe Heterostructures. *ECS Journal of Solid State Science and Technology*, **2014**, 3, P302-P309	2	3

47	Elucidating the role of La3+/Sm3+ in the carbon paths of dry reforming of methane over Ni/Ce-La(Sm)-Cu-O using transient kinetics and isotopic techniques. *Applied Catalysis B: Environmental*, **2022**, 304, 121015	21.8	3
46	Phonon Dynamics and Transport Properties of Copper Thiocyanate and Copper Selenocyanate Pseudohalides. *ACS Omega*, **2020**, 5, 28637-28642	3.9	3
45	Quantifying the Transverse-Electric-Dominant 260 nm Emission from Molecular Beam Epitaxy-Grown GaN-Quantum-Disks Embedded in AlN Nanowires: A Comprehensive Optical and Morphological Characterization. *ACS Applied Materials & Interfaces*, **2020**, 12, 41649-41658	9.5	3
44	Reduction and Increase in Thermal Conductivity of Si Irradiated with Ga via Focused Ion Beam. *ACS Applied Materials & Interfaces*, **2018**, 10, 37679-37684	9.5	3
43	Optimization of Specimen Preparation Methods for Cryo Electron Microscopy of Oil-in-water Emulsions. *Microscopy and Microanalysis*, **2017**, 23, 2158-2159	0.5	2
42	A strategy to convert propane to aromatics (BTX) using TiNp grafted at the periphery of ZSM-5 by surface organometallic chemistry. *Dalton Transactions*, **2019**, 48, 6611-6620	4.3	2
41	Synthesis of Titanium Dioxide Nanoparticles Using a Double-Slit Curved Wall-Jet Burner. *Combustion Science and Technology*, **2016**, 188, 623-636	1.5	2
40	Transmission electron microscopy of mercury metal. *Journal of Microscopy*, **2016**, 263, 365-70	1.9	2
39	Experimental investigation of inhomogeneities, nanoscopic phase separation, and magnetism in arc melted Fe-Cu metals with equal atomic ratio of the constituents. *Journal of Applied Physics*, **2015**, 118, 233904	2.5	2
38	Hydrogen production via steam reforming of glycerol over Ce-La-Cu-O ternary oxide catalyst: an experimental and DFT study. *Applied Surface Science*, **2022**, 586, 152798	6.7	2
37	Variation in sooting characteristics and cetane number of diesel with the addition of a monoterpene biofuel, □pinene. *Fuel*, **2022**, 314, 123082	7.1	2
36	CO Oxidation Catalyzed by Ag Nanoparticles Supported on SnO/CeO2. *Journal of the Brazilian Chemical Society*, **2015**,	1.5	2
35	Micro-to-nano Scale Strain Characterization of 2024 Aluminum-alloys with Incoherent/Coherent Precipitates. *Microscopy and Microanalysis*, **2020**, 26, 1528-1530	0.5	2
34	Active and stable Fe-based catalyst, mechanism, and key role of alkali promoters in ammonia synthesis. *Journal of Catalysis*, **2021**, 394, 353-365	7.3	2
33	Characterization of Catalyst-nanomaterials with Myriad Modalities of Transmission Electron Microscopy. *Microscopy and Microanalysis*, **2019**, 25, 1692-1693	0.5	1
32	Characterization of Ultrathin Strained-Si Channel Layers of n-MOSFETs Using Transmission Electron Microscopy. *Materials Research Society Symposia Proceedings*, **2005**, 864, 391		1
31	Scale-Dependent Structure□Property Correlations of Precipitation-Hardened Aluminum Alloys: A Review. *Jom*, **2022**, 74, 361-380	2.1	1
30	Hydrogen Selective Catalytic Reduction of Nitrogen Oxide on Pt- and Pd-Based Catalysts for Lean-Burn Automobile Applications		1

29	Engineering Band-Type Alignment in CsPbBr Perovskite-Based Artificial Multiple Quantum Wells. *Advanced Materials*, **2021**, 33, e2005166	24	1
28	Thin Film Transistors: Contact-Induced Nucleation in High-Performance Bottom-Contact Organic Thin Film Transistors Manufactured by Large-Area Compatible Solution Processing (Adv. Funct. Mater. 14/2016). *Advanced Functional Materials*, **2016**, 26, 2396-2396	15.6	1
27	Tungsten(VI) Carbyne/Bis(carbene) Tautomerization Enabled by N-Donor SBA15 Surface Ligands: A Solid-State NMR and DFT Study. *Angewandte Chemie*, **2016**, 128, 11328-11332	3.6	1
26	Application of aberration-corrected scanning transmission electron microscopy in conjunction with valence electron energy loss spectroscopy for the nanoscale mapping of the elastic properties of Al-Li-Cu alloys. *Microscopy Research and Technique*, **2021**, 84, 869-880	2.8	1
25	Electrochemical Energy Storage: Mesoporous Reduced Graphene Oxide as a High Capacity Cathode for Aluminum Batteries (Small 51/2018). *Small*, **2018**, 14, 1870251	11	1
24	Activation of Ni2V2O7 to nonstoichiometric NiV3O8 for solar-driven photoelectrochemical water oxidation. *Journal of Environmental Chemical Engineering*, **2021**, 9, 105526	6.8	1
23	Effect of Vacuum Annealing on Structural and Electrical Properties of Germanium Telluride Thin Films. *Materials Research Bulletin*, **2021**, 111575	5.1	1
22	Effect of precipitate coherency on the corrosion-induced hydrogen trapping in 2024 aluminum alloy. *International Journal of Hydrogen Energy*, **2021**, 46, 34487-34497	6.7	1
21	Microscopy techniques applied to submicron characterization of oilfield produced water. *Journal of Petroleum Science and Engineering*, **2021**, 206, 108930	4.4	1
20	Compact broadband (O, E, S, C, L & U bands) silicon TE-pass polarizer based on ridge waveguide adiabatic S-bends.. *Optics Express*, **2022**, 30, 10087-10095	3.3	1
19	Role of embedding choline chloride-urea deep eutectic solvent on biomass-derived porous activated carbon in its capacitive deionization performance. *Desalination*, **2022**, 530, 115674	10.3	1
18	A user-friendly FIB lift-out technique to prepare plan-view TEM sample of 2D thin film materials.. *Ultramicroscopy*, **2022**, 235, 113496	3.1	0
17	Temperature dependence of capacitance–voltage characteristics of germanium telluride thin films. *Journal of Materials Research and Technology*, **2022**, 18, 2631-2640	5.5	0
16	Determining the Differences in Image-resolutions of Single-particle CryoTEM Datasets Acquired with Indirect-electron and Direct-electron CMOS Cameras. *Microscopy and Microanalysis*, **2019**, 25, 1014-1015	0.5	
15	Nano-characterization of silicon-based multilayers using the technique of STEM-EELS spectrum-imaging. *Materials Today Communications*, **2020**, 25, 101209	2.5	
14	TEM Investigations of Pt-NPs Loaded Fibrous Nano-Catalyst Support KCC-1. *Microscopy and Microanalysis*, **2014**, 20, 174-175	0.5	
13	STEM-EDS Characterization of Platinum-Modified Nickel Nanoparticles. *Microscopy and Microanalysis*, **2014**, 20, 478-479	0.5	
12	Analysis of Amorphous-to-crystalline Germanium Stack with Cs-corrected Analytical STEM. *Microscopy and Microanalysis*, **2017**, 23, 1514-1515	0.5	

11	Characterization of Crude Oil Emulsions by Cryo Electron Microscopies. *Microscopy and Microanalysis*, **2015**, 21, 181-182	0.5
10	Characterization of core/shell bi-metallic cube-shaped nanoparticles with scanning transmission electron microscopy. *Microscopy and Microanalysis*, **2015**, 21, 1069-1070	0.5
9	Investigation of radiation effects on the properties of organic semiconductors using low-dose TEM analysis. *Microscopy and Microanalysis*, **2012**, 18, 1436-1437	0.5
8	Low Temperature CVD Route to Binary and Ternary Diffusion Barrier Nitrides for Cu Metallization. *Materials Research Society Symposia Proceedings*, **1998**, 514, 499	
7	Investigations of crude-oil emulsions at the micro-to-nano scales. *Fuel*, **2022**, 313, 122692	7.1
6	Competition between Chiral Energy and Chiral Damping in the Asymmetric Expansion of Magnetic Bubbles. *ACS Applied Electronic Materials*, **2021**, 3, 4734-4742	4
5	Electrochemical Energy Storage: Harnessing the Extracellular Electron Transfer Capability of Geobacter sulfurreducens for Ambient Synthesis of Stable Bifunctional Single-Atom Electrocatalyst for Water Splitting (Adv. Funct. Mater. 22/2021). *Advanced Functional Materials*, **2021**, 31, 2170161	15.6
4	Characterization of T8 Tempered Al-Li-Cu alloy (AA2195) by Using AC- STEM. *Microscopy and Microanalysis*, **2016**, 22, 1946-1947	0.5
3	Characterization of a Porous Carbon Material Functionalized with Cobalt-Oxide/Cobalt Core-Shell Nanoparticles for Lithium Ion Battery Electrodes. *MRS Advances*, **2016**, 1, 1061-1066	0.7
2	Effects of the addition of a high energy density fuel, adamantane to diesel on its cetane number, sooting propensity, and soot nanostructural properties **2022**, 2, 100008	
1	Fuel oxygenation as a novel method to reduce sooting propensity of fuels: An investigation with gasoline surrogate fuels. *Fuel*, **2022**, 324, 124562	7.1