

Chandra Sekhar Tiwary

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2279929/chandra-sekhar-tiwary-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

309
papers

8,815
citations

48
h-index

78
g-index

330
ext. papers

10,700
ext. citations

7.2
avg, IF

6.47
L-index

#	Paper	IF	Citations
309	Achieving Highly Efficient, Selective, and Stable CO ₂ Reduction on Nitrogen-Doped Carbon Nanotubes. <i>ACS Nano</i> , 2015 , 9, 5364-71	16.7	451
308	A metal-free electrocatalyst for carbon dioxide reduction to multi-carbon hydrocarbons and oxygenates. <i>Nature Communications</i> , 2016 , 7, 13869	17.4	385
307	Nitrogen-Doped Carbon Nanotube Arrays for High-Efficiency Electrochemical Reduction of CO ₂ : On the Understanding of Defects, Defect Density, and Selectivity. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13701-5	16.4	315
306	Exfoliation of a non-van der Waals material from iron ore hematite. <i>Nature Nanotechnology</i> , 2018 , 13, 602-609	28.7	179
305	Chemical Vapor Deposition of Monolayer Rhenium Disulfide (ReS ₂). <i>Advanced Materials</i> , 2015 , 27, 4640-84	8.4	177
304	Palladium Nanoparticles Supported on Nitrogen and Sulfur Dual-Doped Graphene as Highly Active Electrocatalysts for Formic Acid and Methanol Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10858-65	9.5	153
303	Re Doping in 2D Transition Metal Dichalcogenides as a New Route to Tailor Structural Phases and Induced Magnetism. <i>Advanced Materials</i> , 2017 , 29, 1703754	24	130
302	Blue orange light emission from biogenic synthesized silver nanoparticles using <i>Trichoderma viride</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2010 , 75, 175-8	6	125
301	Quaternary 2D Transition Metal Dichalcogenides (TMDs) with Tunable Bandgap. <i>Advanced Materials</i> , 2017 , 29, 1702457	24	124
300	Worm-Shape Pt Nanocrystals Grown on Nitrogen-Doped Low-Defect Graphene Sheets: Highly Efficient Electrocatalysts for Methanol Oxidation Reaction. <i>Small</i> , 2017 , 13, 1603013	11	117
299	Synthesis of a new tungsten-free γ -cobalt-based superalloy by tuning alloying additions. <i>Acta Materialia</i> , 2015 , 85, 85-94	8.4	114
298	Controllable Codoping of Nitrogen and Sulfur in Graphene for Highly Efficient Li-Oxygen Batteries and Direct Methanol Fuel Cells. <i>Chemistry of Materials</i> , 2016 , 28, 1737-1745	9.6	113
297	A new class of high strength high temperature Cobalt based γ -CoMoAl alloys stabilized with Ta addition. <i>Acta Materialia</i> , 2015 , 97, 29-40	8.4	112
296	A new tungsten-free γ -CoAlMoNb-based superalloy. <i>Scripta Materialia</i> , 2015 , 98, 36-39	5.6	111
295	Atomically thin gallium layers from solid-melt exfoliation. <i>Science Advances</i> , 2018 , 4, e1701373	14.3	109
294	Carbon Nitrogen Nanotubes as Efficient Bifunctional Electrocatalysts for Oxygen Reduction and Evolution Reactions. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 11991-2000	9.5	103
293	Yellow-orange light emission from Mn ²⁺ -doped ZnS nanoparticles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008 , 40, 3115-3120	3	100

292	Multi-layer graphene reinforced aluminum [Manufacturing of high strength composite by friction stir alloying. <i>Composites Part B: Engineering</i> , 2018 , 136, 63-71	10	99
291	High-Entropy Alloys as Catalysts for the CO ₂ and CO Reduction Reactions: Experimental Realization. <i>ACS Catalysis</i> , 2020 , 10, 3658-3663	13.1	95
290	Nonlinear Optical Properties and Temperature-Dependent UV-vis Absorption and Photoluminescence Emission in 2D Hexagonal Boron Nitride Nanosheets. <i>Advanced Optical Materials</i> , 2015 , 3, 828-835	8.1	88
289	Vacancy ordered phases and one-dimensional quasiperiodicity. <i>Acta Metallurgica</i> , 1987 , 35, 727-733		88
288	Fluorinated h-BN as a magnetic semiconductor. <i>Science Advances</i> , 2017 , 3, e1700842	14.3	87
287	High-strength bulk Al-based bimodal ultrafine eutectic composite with enhanced plasticity. <i>Journal of Materials Research</i> , 2009 , 24, 2605-2609	2.5	85
286	Low-density three-dimensional foam using self-reinforced hybrid two-dimensional atomic layers. <i>Nature Communications</i> , 2014 , 5, 4541	17.4	82
285	Field emission with ultralow turn on voltage from metal decorated carbon nanotubes. <i>ACS Nano</i> , 2014 , 8, 7763-70	16.7	80
284	Nitrogen-Doped Carbon Nanotube Arrays for High-Efficiency Electrochemical Reduction of CO ₂ : On the Understanding of Defects, Defect Density, and Selectivity. <i>Angewandte Chemie</i> , 2015 , 127, 13905-13909	3.6	78
283	Subsurface deformation during Vickers indentation of bulk metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 375-377, 1191-1195	5.3	77
282	Nanodiamond-based thermal fluids. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 4778-85	9.5	71
281	Cryo-mediated exfoliation and fracturing of layered materials into 2D quantum dots. <i>Science Advances</i> , 2017 , 3, e1701500	14.3	70
280	Magnetism in two-dimensional materials beyond graphene. <i>Materials Today</i> , 2019 , 27, 107-122	21.8	69
279	Enhanced visible light emission from Co ²⁺ doped ZnS nanoparticles. <i>Physica B: Condensed Matter</i> , 2009 , 404, 3855-3858	2.8	65
278	Enhanced nonlinear optical properties of graphene oxide/silver nanocomposites measured by Z-scan technique. <i>RSC Advances</i> , 2016 , 6, 10319-10325	3.7	63
277	Ethylenediamine assisted synthesis of wurtzite zinc sulphide nanosheets and porous zinc oxide nanostructures: near white light photoluminescence emission and photocatalytic activity under visible light irradiation. <i>CrystEngComm</i> , 2013 , 15, 5515	3.3	62
276	Synthesis of Low-Density, Carbon-Doped, Porous Hexagonal Boron Nitride Solids. <i>ACS Nano</i> , 2015 , 9, 12088-95	16.7	61
275	One-step electrodeposited 3D-ternary composite of zirconia nanoparticles, rGO and polypyrrole with enhanced supercapacitor performance. <i>Nano Energy</i> , 2017 , 31, 225-232	17.1	61

274	Development of a high temperature high strength Al alloy by addition of small amounts of Sc and Mg to 2219 alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 687, 221-231	5.3	56
273	Unzipping carbon nanotubes at high impact. <i>Nano Letters</i> , 2014 , 14, 4131-7	11.5	55
272	Microstructure and wear behaviour of aluminium alloys containing embedded nanoscaled lead dispersoids. <i>Acta Materialia</i> , 2004 , 52, 2293-2304	8.4	55
271	Super-elasticity of three-dimensionally cross-linked graphene materials all the way to deep cryogenic temperatures. <i>Science Advances</i> , 2019 , 5, eaav2589	14.3	53
270	On the effect of Re addition on microstructural evolution of a CoNi-based superalloy. <i>Acta Materialia</i> , 2019 , 168, 37-51	8.4	52
269	Enhanced field emission properties from CNT arrays synthesized on Inconel superalloy. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 1986-91	9.5	50
268	Effect of Gallium on microstructure and mechanical properties of NbBi eutectic alloy. <i>Intermetallics</i> , 2011 , 19, 1943-1952	3.5	50
267	Electronic waste recycling via cryo-milling and nanoparticle beneficiation. <i>Materials Today</i> , 2017 , 20, 67-73	21.8	49
266	Nanosized Pt anchored onto 3D nitrogen-doped graphene nanoribbons towards efficient methanol electrooxidation. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 19696-19701	13	49
265	Graphene Supported MoS Structures with High Defect Density for an Efficient HER Electrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 12629-12638	9.5	49
264	Phase evolution and crystallography of precipitates during decomposition of new tungsten-free Co(Ni)MoAlNb superalloys at elevated temperatures. <i>Journal of Materials Science</i> , 2016 , 51, 7843-7860	4.3	48
263	Emerging 2D metal oxides and their applications. <i>Materials Today</i> , 2021 , 45, 142-168	21.8	48
262	Polytypism in ultrathin tellurium. <i>2D Materials</i> , 2019 , 6, 015013	5.9	48
261	Effect of Cr addition on cobalt-based CoMoAlTa class of superalloys: a combined experimental and computational study. <i>Journal of Materials Science</i> , 2017 , 52, 11036-11047	4.3	46
260	A Non-van der Waals Two-Dimensional Material from Natural Titanium Mineral Ore Ilmenite. <i>Chemistry of Materials</i> , 2018 , 30, 5923-5931	9.6	45
259	Density variant carbon nanotube interconnected solids. <i>Advanced Materials</i> , 2015 , 27, 1842-50	24	45
258	Synthesis of wurtzite-phase ZnS nanocrystal and its optical properties. <i>Journal of Luminescence</i> , 2009 , 129, 1366-1370	3.8	44
257	Multiscale Geometric Design Principles Applied to 3D Printed Schwarzites. <i>Advanced Materials</i> , 2018 , 30, 1704820	24	44

256	3D Porous Graphene by Low-Temperature Plasma Welding for Bone Implants. <i>Advanced Materials</i> , 2016 , 28, 8959-8967	24	43
255	Lightweight Hexagonal Boron Nitride Foam for CO Absorption. <i>ACS Nano</i> , 2017 , 11, 8944-8952	16.7	42
254	3D macroporous solids from chemically cross-linked carbon nanotubes. <i>Small</i> , 2015 , 11, 688-93	11	41
253	Room temperature synthesis of Mn ²⁺ doped ZnS d-dots and observation of tunable dual emission: Effects of doping concentration, temperature, and ultraviolet light illumination. <i>Journal of Applied Physics</i> , 2013 , 113, 114308	2.5	41
252	Blue photoluminescent carbon nanodots from limeade. <i>Materials Science and Engineering C</i> , 2016 , 69, 914-21	8.3	41
251	Photo-induced degradation of bio-toxic Ciprofloxacin using the porous 3D hybrid architecture of an atomically thin sulfur-doped g-CN/ZnO nanosheet. <i>Environmental Research</i> , 2020 , 183, 109154	7.9	40
250	Hybrid 2D nanostructures for mechanical reinforcement and thermal conductivity enhancement in polymer composites. <i>Composites Science and Technology</i> , 2018 , 159, 103-110	8.6	40
249	Elemental site occupancy in the L12 A3B ordered intermetallic phase in Co-based superalloys and its influence on the microstructure. <i>Acta Materialia</i> , 2019 , 163, 140-153	8.4	40
248	On the origin of a remarkable increase in the strength and stability of an Al rich Al-Ni eutectic alloy by Zr addition. <i>Acta Materialia</i> , 2019 , 170, 205-217	8.4	39
247	Tensile flow and work hardening behavior of hot cross-rolled AA7010 aluminum alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 577, 87-100	5.3	39
246	Metal Immiscibility Route to Synthesis of Ultrathin Carbides, Borides, and Nitrides. <i>Advanced Materials</i> , 2017 , 29, 1700364	24	38
245	Low Contact Barrier in 2H/1T' MoTe In-Plane Heterostructure Synthesized by Chemical Vapor Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 12777-12785	9.5	38
244	Structural Phase Transformation in Strained Monolayer MoWSe Alloy. <i>ACS Nano</i> , 2018 , 12, 3468-3476	16.7	38
243	Microstructure and mechanical properties of oxidation resistant suction cast Nb ₅ BiAl alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 74-85	5.3	38
242	On the high temperature coarsening kinetics of γ precipitates in a high strength Co _{37.6} Ni _{35.4} Al _{9.9} Mo _{4.9} Cr _{5.9} Ta _{2.8} Ti _{3.5} fcc-based high entropy alloy. <i>Acta Materialia</i> , 2019 , 177, 82-95	8.4	37
241	Development of alloys with high strength at elevated temperatures by tuning the bimodal microstructure in the AlCuNi eutectic system. <i>Scripta Materialia</i> , 2014 , 93, 20-23	5.6	36
240	Synthesis of ultralow density 3D graphene-CNT foams using a two-step method. <i>Nanoscale</i> , 2016 , 8, 15857-63	16.7	36
239	Deformation Mechanisms of Vertically Stacked WS ₂ /MoS ₂ Heterostructures: The Role of Interfaces. <i>ACS Nano</i> , 2018 , 12, 4036-4044	16.7	35

238	Morphology controlled synthesis of wurtzite ZnS nanostructures through simple hydrothermal method and observation of white light emission from ZnO obtained by annealing the synthesized ZnS nanostructures. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 4338-4346	7.1	35
237	Ultrafast non-radiative dynamics of atomically thin MoSe. <i>Nature Communications</i> , 2017 , 8, 1745	17.4	35
236	Thermoelectric Properties of Bi Doped Tetrahedrite. <i>Journal of Electronic Materials</i> , 2017 , 46, 2616-2622.	1.9	35
235	On the wear mechanism of iron and nickel based transition metal-metalloid metallic glasses. <i>Acta Metallurgica</i> , 1987 , 35, 1463-1473		35
234	High hardness in the biocompatible intermetallic compound ErTi_3Au . <i>Science Advances</i> , 2016 , 2, e1600319.	14.3	34
233	Chemical Makeup and Hydrophilic Behavior of Graphene Oxide Nanoribbons after Low-Temperature Fluorination. <i>ACS Nano</i> , 2015 , 9, 7009-18	16.7	34
232	Synthesis and optical characterization of monodispersed Mn^{2+} doped CdS nanoparticles. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008 , 372, 5825-5830	2.3	34
231	Grain size effect on the phase transformation temperature of nanostructured CuFe_2O_4 . <i>Journal of Applied Physics</i> , 2011 , 109, 013532	2.5	33
230	Nonisothermal and Isothermal Oxidation Behavior of Nb-Si-Mo Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2008 , 39, 577-592	2.3	33
229	Strain Rate Dependent Shear Plasticity in Graphite Oxide. <i>Nano Letters</i> , 2016 , 16, 1127-31	11.5	32
228	Morphogenesis and mechanostabilization of complex natural and 3D printed shapes. <i>Science Advances</i> , 2015 , 1, e1400052	14.3	31
227	Preparation of nanocrystalline high-entropy alloys via cryomilling of cast ingots. <i>Journal of Materials Science</i> , 2018 , 53, 13411-13423	4.3	31
226	Microstructure and texture evolution during accumulative roll bonding of aluminium alloys AA2219/AA5086 composite laminates. <i>Journal of Materials Science</i> , 2012 , 47, 6402-6419	4.3	30
225	Magnetic field controlled graphene oxide-based origami with enhanced surface area and mechanical properties. <i>Nanoscale</i> , 2017 , 9, 6991-6997	7.7	29
224	Nonlinear Optical Properties and Temperature Dependent Photoluminescence in hBN-GO Heterostructure 2D Material. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 8060-8069	3.8	29
223	Copper Nanoparticle-Graphene Composite-Based Transparent Surface Coating with Antiviral Activity against Influenza Virus. <i>ACS Applied Nano Materials</i> , 2021 , 4, 352-362	5.6	29
222	Ambient solid-state mechano-chemical reactions between functionalized carbon nanotubes. <i>Nature Communications</i> , 2015 , 6, 7291	17.4	28
221	Al based ultra-fine eutectic with high room temperature plasticity and elevated temperature strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 639, 359-369	5.3	28

220	Magnitude and Origin of Electrical Noise at Individual Grain Boundaries in Graphene. <i>Nano Letters</i> , 2016 , 16, 562-7	11.5	28
219	Zirconia-Nanoparticle-Reinforced Morphology-Engineered Graphene-Based Foams. <i>Advanced Materials</i> , 2015 , 27, 4534-43	24	28
218	Synthesis of free standing nanocrystalline Cu by ball milling at cryogenic temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 558, 52-58	5.3	28
217	Multiphoton absorption and refraction in Mn ²⁺ doped ZnS quantum dots. <i>Journal of Applied Physics</i> , 2009 , 105, 024313	2.5	28
216	Chemical-free graphene by unzipping carbon nanotubes using cryo-milling. <i>Carbon</i> , 2015 , 89, 217-224	10.4	27
215	Enhanced supercapacitor performance of a 3D architecture tailored using atomically thin rGO/MoS ₂ 2D sheets. <i>RSC Advances</i> , 2016 , 6, 93384-93393	3.7	27
214	Synthesis of pure iron magnetic nanoparticles in large quantity. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 385001	3	27
213	Effect of Carrier Localization on Electrical Transport and Noise at Individual Grain Boundaries in Monolayer MoS. <i>Nano Letters</i> , 2017 , 17, 5452-5457	11.5	27
212	Synthesis and enhanced green photoluminescence emission from BCT ZnS nanocrystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 1874-1879	1.6	27
211	Disorder trapping and grain refinement during solidification of undercooled Fe ₈₈ at% Ge melts. <i>Philosophical Magazine</i> , 2007 , 87, 3817-3837	1.6	27
210	Effect of length scale on mechanical properties of Al-Cu eutectic alloy. <i>Applied Physics Letters</i> , 2012 , 101, 171901	3.4	26
209	Size effect on the lattice parameter of KCl during mechanical milling. <i>Scripta Materialia</i> , 2009 , 61, 600-603	3.6	26
208	Rapid solidification behaviour of undercooled levitated Fe ₈₈ Ge alloy droplets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 375-377, 464-467	5.3	26
207	Synthesis and porous h-BN 3D architectures for effective humidity and gas sensors. <i>RSC Advances</i> , 2016 , 6, 87888-87896	3.7	26
206	A simple method of synthesis and optical properties of Mn doped ZnO nanocups. <i>Materials Letters</i> , 2013 , 91, 379-382	3.3	25
205	Waste Animal Bone as a Novel Layered Heterogeneous Catalyst for the Transesterification of Biodiesel. <i>Catalysis Letters</i> , 2019 , 149, 1100-1110	2.8	24
204	Multi-component (Ag-Au-Cu-Pd-Pt) alloy nanoparticle-decorated p-type 2D-molybdenum disulfide (MoS) for enhanced hydrogen sensing. <i>Nanoscale</i> , 2020 , 12, 11830-11841	7.7	24
203	Length-scale dependent mechanical properties of Al-Cu eutectic alloy: Molecular dynamics based model and its experimental verification. <i>Journal of Applied Physics</i> , 2014 , 115, 203502	2.5	24

202	Enhancing elevated temperature strength of copper containing aluminium alloys by forming L1 AlZr precipitates and nucleating δ precipitates on them. <i>Scientific Reports</i> , 2017 , 7, 11154	4.9	24
201	Nature Inspired Strategy to Enhance Mechanical Properties via Liquid Reinforcement. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700240	4.6	24
200	Telluride-Based Atomically Thin Layers of Ternary Two-Dimensional Transition Metal Dichalcogenide Alloys. <i>Chemistry of Materials</i> , 2018 , 30, 7262-7268	9.6	23
199	Observation of Combined Effect of Temperature and Pressure on Cubic to Hexagonal Phase Transformation in ZnS at the Nanoscale. <i>Crystal Growth and Design</i> , 2014 , 14, 4240-4246	3.5	22
198	Microstructural and mechanical behavior study of suction cast NbBi binary alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 583, 188-198	5.3	22
197	Phase Segregation Behavior of Two-Dimensional Transition Metal Dichalcogenide Binary Alloys Induced by Dissimilar Substitution. <i>Chemistry of Materials</i> , 2017 , 29, 7431-7439	9.6	22
196	Effect of processing route on phase stability in equiatomic multicomponent Ti ₂₀ Fe ₂₀ Ni ₂₀ Co ₂₀ Cu ₂₀ high entropy alloy. <i>Materials Science and Technology</i> , 2015 , 31, 1214-1222	1.5	22
195	Combined Cryo and Room-Temperature Ball Milling to Produce Ultrafine Halide Crystallites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 1127-1137	7.3	22
194	Three-photon-induced four-photon absorption and nonlinear refraction in ZnO quantum dots. <i>Optics Letters</i> , 2009 , 34, 3644-6	3	22
193	Colloidal N-Doped Graphene Quantum Dots with Tailored Luminescent Downshifting and Detection of UVA Radiation with Enhanced Responsivity. <i>ACS Omega</i> , 2018 , 3, 16260-16270	3.9	22
192	Controlled 3D Carbon Nanotube Structures by Plasma Welding. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500755	4.6	21
191	Manufacturing of high strength aluminium composites reinforced with nano tungsten particles for electrical application and investigation on in-situ reaction during processing. <i>Journal of Alloys and Compounds</i> , 2018 , 767, 1072-1082	5.7	21
190	Preparation of ultrafine CsCl crystallites by combined cryogenic and room temperature ball milling. <i>Ceramics International</i> , 2011 , 37, 3677-3686	5.1	21
189	2D Hexagonal Boron Nitride-Coated Cotton Fabric with Self-Extinguishing Property. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 45274-45280	9.5	21
188	High stiffness polymer composite with tunable transparency. <i>Materials Today</i> , 2018 , 21, 475-482	21.8	20
187	Metal-Free Dual Modal Contrast Agents Based on Fluorographene Quantum Dots. <i>Particle and Particle Systems Characterization</i> , 2017 , 34, 1600221	3.1	20
186	Formic acid and methanol electro-oxidation and counter hydrogen production using nano high entropy catalyst. <i>Materials Today Energy</i> , 2020 , 16, 100393	7	19
185	MoS quantum dots decorated ultrathin NiO nanosheets for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2020 , 566, 411-418	9.3	19

184	Mechano-chemical stabilization of three-dimensional carbon nanotube aggregates. <i>Carbon</i> , 2016 , 110, 27-33	10.4	19
183	A multivariate modeling and experimental realization of photocatalytic system of engineered S-CN/ZnO hybrid for ciprofloxacin removal: Influencing factors and degradation pathways. <i>Environmental Research</i> , 2021 , 196, 110390	7.9	19
182	Magnetic Properties and Photocatalytic Applications of 2D Sheets of Nonlayered Manganese Telluride by Liquid Exfoliation. <i>ACS Applied Nano Materials</i> , 2018 , 1, 6427-6434	5.6	19
181	Thermally Induced 2D Alloy-Heterostructure Transformation in Quaternary Alloys. <i>Advanced Materials</i> , 2018 , 30, e1804218	24	19
180	Chemically interconnected light-weight 3D-carbon nanotube solid network. <i>Carbon</i> , 2017 , 119, 142-149	10.4	18
179	Interface and defect engineering of hybrid nanostructures toward an efficient HER catalyst. <i>Nanoscale</i> , 2019 , 11, 12489-12496	7.7	18
178	Temperature- and Size-Dependent Compositionally Tuned Microstructural Landscape for Ag-46 Atom % Cu Nanoalloy Prepared by Laser Ablation in Liquid. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 27699-27706	3.8	18
177	Chromiteen: A New 2D Oxide Magnetic Material from Natural Ore. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800549	4.6	18
176	Synthesis and 3D Interconnected Nanostructured h-BN-Based Biocomposites by Low-Temperature Plasma Sintering: Bone Regeneration Applications. <i>ACS Omega</i> , 2018 , 3, 6013-6021	3.9	18
175	Two-Dimensional Lateral Epitaxy of 2H (MoSe)-1T' (ReSe) Phases. <i>Nano Letters</i> , 2019 , 19, 6338-6345	11.5	18
174	Optical Control of Non-Equilibrium Phonon Dynamics. <i>Nano Letters</i> , 2019 , 19, 4981-4989	11.5	18
173	Lanthanum ions decorated 2-dimensional g-CN for ciprofloxacin photodegradation. <i>Chemosphere</i> , 2021 , 268, 128780	8.4	18
172	Photocatalytic dye degradation under sunlight irradiation using cerium ion adsorbed two-dimensional graphitic carbon nitride. <i>Journal of Environmental Chemical Engineering</i> , 2020 , 8, 103942	6.8	17
171	Effects of Different Modes of Hot Cross-Rolling in 7010 Aluminum Alloy: Part II. Mechanical Properties Anisotropy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 2764-2777	2.3	17
170	Preparation of Freestanding Zn Nanocrystallites by Combined Milling at Cryogenic and Room Temperatures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 1917-1924	2.3	17
169	Nanoscale deformation and friction characteristics of atomically thin WSe ₂ and heterostructure using nanoscratch and Raman spectroscopy. <i>2D Materials</i> , 2017 , 4, 045005	5.9	17
168	Magnetic, electric and dielectric properties of FeCo alloy nanoparticles dispersed in amorphous matrix. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 2505-2510	1.6	17
167	Methanol Electrolysis for Hydrogen Production Using Polymer Electrolyte Membrane: A Mini-Review. <i>Energies</i> , 2020 , 13, 5879	3.1	17

166	Velcro-Inspired SiC Fuzzy Fibers for Aerospace Applications. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 13742-13750	9.5	16
165	Tunability of monodispersed intermetallic AuCu nanoparticles through understanding of reaction pathways. <i>RSC Advances</i> , 2015 , 5, 4389-4395	3.7	16
164	Characterization of the Hot Deformation Behavior and Microstructure Evolution of a New ϵ Strengthened Cobalt-Based Superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 4895-4905	2.3	16
163	Underwater adhesive using solid-liquid polymer mixes. <i>Materials Today Chemistry</i> , 2018 , 9, 149-157	6.2	16
162	Effect of Manganese (II) Oxide on microstructure and ionic transport properties of nanostructured cubic zirconia. <i>Electrochimica Acta</i> , 2015 , 170, 360-368	6.7	16
161	Formation and coarsening of a nanodispersed microstructure in melt spun AlNiZr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 255, 107-116	5.3	16
160	High Toughness in Ultralow Density Graphene Oxide Foam. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700030	4.30	15
159	3D carbon coated NiCoS nanowires doped with nitrogen for electrochemical energy storage and conversion. <i>Journal of Colloid and Interface Science</i> , 2019 , 556, 449-457	9.3	15
158	Tailoring of structural and photoluminescence emissions by Mn and Cu co-doping in 2D nanostructures of ZnS for the visualization of latent fingerprints and generation of white light. <i>Nanoscale</i> , 2019 , 11, 2017-2026	7.7	15
157	Quantification of the Particle Size and Stability of Graphene Oxide in a Variety of Solvents. <i>Particle and Particle Systems Characterization</i> , 2015 , 32, 334-339	3.1	15
156	Scalable Synthesis of Atomically Thin Gallium Telluride Nanosheets for Supercapacitor Applications. <i>ACS Applied Nano Materials</i> , 2021 , 4, 4829-4838	5.6	15
155	An Insight into the Phase Transformation of WS upon Fluorination. <i>Advanced Materials</i> , 2018 , 30, e1803366	3.66	15
154	Phase formation and stability of alloy phases in free nanoparticles: some insights. <i>RSC Advances</i> , 2015 , 5, 35541-35550	3.7	14
153	Liquid Exfoliation of Icosahedral Quasicrystals. <i>Advanced Functional Materials</i> , 2018 , 28, 1801181	15.6	14
152	Enhancement of High Temperature Strength of 2219 Alloys Through Small Additions of Nb and Zr and a Novel Heat Treatment. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 3047-3057	2.3	14
151	Numerical simulation of copper recovery from converter slags by the utilisation of spent potlining (SPL) from aluminium electrolytic cells. <i>Canadian Metallurgical Quarterly</i> , 2016 , 55, 251-260	0.9	14
150	Effect of thermal annealing on dual photoluminescence emission characteristics of chemically synthesized uncapped Mn ²⁺ doped ZnS quantum dots. <i>Journal of Luminescence</i> , 2014 , 155, 359-367	3.8	14
149	Engineering Photophenomena in Large, 3D Structures Composed of Self-Assembled van der Waals Heterostructure Flakes. <i>Advanced Optical Materials</i> , 2015 , 3, 1551-1556	8.1	14

148	Effect of indium addition on microstructural, mechanical and oxidation properties of suction cast NbBi eutectic alloy. <i>Materials Science and Technology</i> , 2013 , 29, 702-709	1.5	14
147	Superparamagnetic behaviour and T ₁ , T ₂ relaxivity of ZnFe ₂ O ₄ nanoparticles for magnetic resonance imaging. <i>Philosophical Magazine</i> , 2013 , 93, 1771-1783	1.6	14
146	A Novel Technique of Synthesis of Highly Fluorescent Carbon Nanoparticles from Broth Constituent and In-vivo Bioimaging of <i>C. elegans</i> . <i>Journal of Fluorescence</i> , 2016 , 26, 1541-8	2.4	14
145	Graphene Oxide Epoxy (GO-xy): GO as Epoxy Adhesive by Interfacial Reaction of Functionalities. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1700657	4.6	14
144	Forster resonance energy transfer assisted white light generation and luminescence tuning in a colloidal graphene quantum dot-dye system. <i>Journal of Colloid and Interface Science</i> , 2020 , 565, 326-336	9.3	13
143	Ballistic Fracturing of Carbon Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 24819-25	9.5	13
142	Thermoelectric Properties of In-Doped Cu ₂ ZnGeSe ₄ . <i>Journal of Electronic Materials</i> , 2016 , 45, 1625-1632	1.9	13
141	3D Printed Tubulanes as Lightweight Hypervelocity Impact Resistant Structures. <i>Small</i> , 2019 , 15, e1904747	4.7	13
140	Effects of Different Modes of Hot Cross-Rolling in 7010 Aluminum Alloy: Part I. Evolution of Microstructure and Texture. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 2746-2763	2.3	13
139	Bacteria as Bio-Template for 3D Carbon Nanotube Architectures. <i>Scientific Reports</i> , 2017 , 7, 9855	4.9	13
138	The structural and dynamical aspects of boron nitride nanotubes under high velocity impacts. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 14776-81	3.6	13
137	Graphene as an electrochemical transfer layer. <i>Carbon</i> , 2019 , 141, 266-273	10.4	13
136	Role of Atomic Layer Functionalization in Building Scalable Bottom-Up Assembly of Ultra-Low Density Multifunctional Three-Dimensional Nanostructures. <i>ACS Nano</i> , 2017 , 11, 806-813	16.7	12
135	Development of High-Strength High-Temperature Cast Al-Ni-Cr Alloys Through Evolution of a Novel Composite Eutectic Structure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 5940-5950	2.3	12
134	Stabilization of a Highly Concentrated Colloidal Suspension of Pristine Metallic Nanoparticles. <i>Langmuir</i> , 2019 , 35, 2668-2673	4	12
133	Simple chemical aqueous synthesis of dahlia nanoflower consisting of finger-like ZnO nanorods and observation of stable ultraviolet photoluminescence emission. <i>Journal of Physics and Chemistry of Solids</i> , 2015 , 78, 84-89	3.9	12
132	Indentation Tests Reveal Geometry-Regulated Stiffening of Nanotube Junctions. <i>Nano Letters</i> , 2016 , 16, 232-6	11.5	12
131	Effect of Mg addition on microstructural, mechanical and environmental properties of NbBi eutectic composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 560, 200-207	5.3	12

130	Joining of dissimilar metals: issues and modelling techniques. <i>Science and Technology of Welding and Joining</i> , 2011 , 16, 313-317	3.7	12
129	Microstructure evolution and thermoelectric properties of Te-poor and Te-rich (Bi,Sb) ₂ Te ₃ prepared via solidification. <i>Journal of Materials Science</i> , 2016 , 51, 7254-7265	4.3	12
128	A perspective on the catalysis using the high entropy alloys. <i>Nano Energy</i> , 2021 , 88, 106261	17.1	12
127	Role of insert material on process loads during FSW. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 3427-3435	3.2	11
126	Transient steel quality under non-isothermal conditions in a multi-strand billet caster tundish: part I. Analysis of fluid flow, thermal behaviour and inclusion behaviour. <i>Ironmaking and Steelmaking</i> , 2017 , 44, 403-412	1.3	11
125	Two-Dimensional Amorphous Cr ₂ O ₃ Modified Metallic Electrodes for Hydrogen Evolution Reaction. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1900025	2.5	11
124	Atomically locked interfaces of metal (Aluminum) and polymer (Polypropylene) using mechanical friction. <i>Polymer</i> , 2019 , 169, 148-153	3.9	11
123	Hydrogen Evolution at the In Situ MoO ₃ /MoS ₂ Heterojunctions Created by Nonthermal O ₂ Plasma Treatment. <i>ACS Applied Energy Materials</i> , 2020 , 3, 5333-5342	6.1	11
122	Extraction of Two-Dimensional Aluminum Alloys from Decagonal Quasicrystals. <i>ACS Nano</i> , 2020 , 14, 7435-7443	16.7	11
121	Consolidation of functionalized graphene at ambient temperature via mechano-chemistry. <i>Carbon</i> , 2018 , 134, 491-499	10.4	11
120	Onset of sphalerite to wurtzite transformation in ZnS nanoparticles. <i>Journal of Applied Physics</i> , 2011 , 110, 034908	2.5	11
119	Formation of metastable β phase in mechanically alloyed tellurium-rich Ag ₁₀₀ Te alloys. <i>Journal of Materials Research</i> , 1995 , 10, 1897-1904	2.5	11
118	Effect of processing route on the bipolar contribution to the thermoelectric properties of n-type eutectic Bi _{22.5} Sb _{7.5} Te ₇₀ alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 682, 791-798	5.7	11
117	Low-cost high entropy alloy (HEA) for high-efficiency oxygen evolution reaction (OER). <i>Nano Research</i> , 2017 , 10, 1897-1904	10	11
116	2D Heterostructure coatings of hBN-MoS ₂ layers for corrosion resistance. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 045301	3	10
115	Direct Ink Writing of Cement Structures Modified with Nanoscale Additive. <i>Advanced Engineering Materials</i> , 2019 , 21, 1801380	3.5	10
114	Synthesis and characterization of Fe- and Co-based ferrite nanoparticles and study of the T ₁ and T ₂ relaxivity of chitosan-coated particles. <i>Journal of Materials Science</i> , 2013 , 48, 812-818	4.3	10
113	Transient steel quality under non-isothermal conditions in a multi-strand billet caster tundish: part II. Effect of a flow-control device. <i>Ironmaking and Steelmaking</i> , 2017 , 44, 413-420	1.3	10

112	Synthesis of bulk metallic glass composites using high oxygen containing Zr sponge. <i>Journal of Materials Science</i> , 2007 , 42, 9359-9365	4.3	10
111	Cryomilling as environmentally friendly synthesis route to prepare nanomaterials. <i>International Materials Reviews</i> , 2021 , 66, 493-532	16.1	10
110	Reversible temperature-dependent photoluminescence in semiconductor quantum dots for the development of a smartphone-based optical thermometer. <i>Nanoscale</i> , 2021 , 13, 2946-2954	7.7	10
109	Strain-Induced Structural Deformation Study of 2D MoxW(1-x) S2. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801262	4.6	9
108	The effect of ball milling on the melting behavior of Sn-CuAg eutectic alloy. <i>Journal of Materials Science</i> , 2009 , 44, 2257-2263	4.3	9
107	Formation of β -Al ₇ Cu ₂ Fe phase during laser processing of quasicrystal-forming Al-Cu-Fe alloy. <i>Philosophical Magazine Letters</i> , 2008 , 88, 219-230	1	9
106	Green Route for Beneficiation of Metallic Materials from Electronic Waste for Selective Reduction of CO ₂ . <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 12142-12150	8.3	9
105	Effects of Cu and In Trace Elements on Microstructure and Thermal and Mechanical Properties of Sn-Zn Eutectic Alloy. <i>Journal of Electronic Materials</i> , 2019 , 48, 2660-2669	1.9	9
104	Self-Stiffening Behavior of Reinforced Carbon Nanotubes Spheres. <i>Advanced Engineering Materials</i> , 2017 , 19, 1600756	3.5	8
103	High-K dielectric sulfur-selenium alloys. <i>Science Advances</i> , 2019 , 5, eaau9785	14.3	8
102	Origami-Inspired 3D Interconnected Molybdenum Carbide Nanoflakes. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701113	4.6	8
101	Hierarchical cage-frame type nanostructure of CeO for bio sensing applications: from glucose to protein detection. <i>Nanotechnology</i> , 2021 , 32, 025504	3.4	8
100	Hexagonal boron nitride-carbon nanotube hybrid network structure for enhanced thermal, mechanical and electrical properties of polyimide nanocomposites. <i>Composites Science and Technology</i> , 2020 , 188, 107977	8.6	8
99	Effects of Minute Addition of Ni on Microstructure and Mechanical Properties of Sn-Zn Eutectic Alloy. <i>Journal of Electronic Materials</i> , 2016 , 45, 5468-5477	1.9	8
98	Magnetic iron nanoparticles for in vivo targeted delivery and as biocompatible contrast agents. <i>RSC Advances</i> , 2016 , 6, 114344-114352	3.7	8
97	A generic approach for mechano-chemical reactions between carbonnanotubes of different functionalities. <i>Carbon</i> , 2016 , 104, 196-202	10.4	8
96	Highly ordered carbon-based nanospheres with high stiffness. <i>Carbon</i> , 2016 , 105, 144-150	10.4	8
95	Development of a schwarzite-based moving bed 3D printed water treatment system for nanoplastic remediation.. <i>RSC Advances</i> , 2021 , 11, 19788-19796	3.7	8

94	Near white light emission and enhanced photocatalytic activity by tweaking surface defects of coaxial ZnO@ZnS core-shell nanorods. <i>Journal of Applied Physics</i> , 2017 , 121, 144301	2.5	7
93	Etching of transition metal dichalcogenide monolayers into nanoribbon arrays. <i>Nanoscale Horizons</i> , 2019 , 4, 689-696	10.8	7
92	The Effect of Minor Addition of Ni on the Microstructural Evolution and Mechanical Properties of Suction Cast Al-0.14 at. pct Sc Binary Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 2591-2603	2.3	7
91	Microstructure and mechanical properties of electron beam weld joints of a Zr ₄₁ Ti ₁₄ Cu ₁₂ Ni ₁₀ Be ₂₃ bulk metallic glass with Zr. <i>Journal of Materials Research</i> , 2007 , 22, 437-444	2.5	7
90	Electrooxidation of Hydrazine Utilizing High-Entropy Alloys: Assisting the Oxygen Evolution Reaction at the Thermodynamic Voltage. <i>ACS Catalysis</i> , 14000-14007	13.1	7
89	Enhancing the oxygen evolution activity of nitrogen-doped graphitic carbon shell-embedded nickel/nickel oxide nanoparticles by surface dissolution. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 3267-3279	7.8	7
88	Atomic Scale Structure Inspired 3D-Printed Porous Structures with Tunable Mechanical Response. <i>Advanced Engineering Materials</i> , 2021 , 23, 2001428	3.5	7
87	Template-free hydrothermal synthesis of amphibious fluorescent carbon nanorice towards anti-counterfeiting applications and unleashing its nonlinear optical properties. <i>RSC Advances</i> , 2016 , 6, 99060-99071	3.7	7
86	Effective Activation Energy for the Solid-State Sintering of Silicon Carbide Ceramics. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 5599-5606	2.3	7
85	Three-dimensional printing of complex graphite structures. <i>Carbon</i> , 2021 , 181, 260-269	10.4	7
84	Emerging two-dimensional tellurides. <i>Materials Today</i> , 2021 ,	21.8	7
83	Structural Reinforcement through Liquid Encapsulation. <i>Advanced Materials Interfaces</i> , 2017 , 4, 16007814.6	14.6	6
82	Boxception: Impact Resistance Structure Using 3D Printing. <i>Advanced Engineering Materials</i> , 2019 , 21, 1900167	3.5	6
81	High-Temperature Workability of Thixocast A356 Aluminum Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 3248-3259	2.3	6
80	Stabilization of the high-temperature and high-pressure cubic phase of ZnO by temperature-controlled milling. <i>Journal of Materials Science</i> , 2016 , 51, 126-137	4.3	6
79	Poly-albumen: Bio-derived structural polymer from polymerized egg white. <i>Materials Today Chemistry</i> , 2018 , 9, 73-79	6.2	6
78	Effect of Grain Size on Structural and Magnetic Properties of CuFe ₂ O ₄ Nanograins Synthesized by Chemical Co-Precipitation. <i>IEEE Transactions on Magnetics</i> , 2012 , 48, 1839-1843	2	6
77	Influence of thermodynamics and local geometry on glass formation in Zr based alloys. <i>Applied Physics Letters</i> , 2008 , 93, 061903	3.4	6

76	Scale-Enhanced Magnetism in Exfoliated Atomically Thin Magnetite Sheets. <i>Small</i> , 2020 , 16, e2004208	11	6
75	Fluorinated Boron Nitride Quantum Dots: A New 0D Material for Energy Conversion and Detection of Cellular Metabolism. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1800346	3.1	6
74	Mechanical and Acoustic Behavior of 3D-Printed Hierarchical Mathematical Fractal Menger Sponge. <i>Advanced Engineering Materials</i> , 2021 , 23, 2001471	3.5	6
73	Interconnecting Bone Nanoparticles by Ovalbumin Molecules to Build a Three-Dimensional Low-Density and Tough Material. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 41757-41762	9.5	6
72	Advance Optical Properties and Emerging Applications of 2D Materials. <i>Frontiers in Materials</i> , 2021 , 8,	4	6
71	Multifunctional Hybrids Based on 2D Fluorinated Graphene Oxide and Superparamagnetic Iron Oxide Nanoparticles. <i>Particle and Particle Systems Characterization</i> , 2017 , 34, 1700245	3.1	5
70	Shear exfoliation synthesis of large-scale graphene-reinforced nanofibers. <i>Carbon</i> , 2020 , 166, 405-413	10.4	5
69	Probing the bacterial detoxification of cadmium to form cadmium sulfide quantum dots and the underlying mechanism. <i>Materials Advances</i> , 2020 , 1, 1168-1175	3.3	5
68	Damage-tolerant 3D-printed ceramics via conformal coating. <i>Science Advances</i> , 2021 , 7,	14.3	5
67	High temperature quasistatic and dynamic mechanical behavior of interconnected 3D carbon nanotube structures. <i>Carbon</i> , 2019 , 142, 291-299	10.4	5
66	Topologically engineered 3D printed architectures with superior mechanical strength. <i>Materials Today</i> , 2021 , 48, 72-72	21.8	5
65	Quantifying instant water cleaning efficiency using zinc oxide decorated complex 3D printed porous architectures. <i>Journal of Hazardous Materials</i> , 2021 , 418, 126383	12.8	5
64	Convert waste petroleum coke to multi-heteroatom self-doped graphene and its application as supercapacitors. <i>Emergent Materials</i> , 2021 , 4, 531-544	3.5	5
63	Enhancing Mechanical Properties of Nanocomposites Using Interconnected Carbon Nanotubes (iCNT) as Reinforcement . <i>Advanced Engineering Materials</i> , 2017 , 19, 1600499	3.5	4
62	Morphology controlled graphene-alloy nanoparticle hybrids with tunable carbon monoxide conversion to carbon dioxide. <i>Nanoscale</i> , 2018 , 10, 8840-8850	7.7	4
61	Achieving Self-Stiffening and Laser Healing by Interconnecting Graphene Oxide Sheets with Amine-Functionalized Ovalbumin. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800932	4.6	4
60	Bio-Derived Hierarchical 3D Architecture from Seeds for Supercapacitor Application. <i>Jom</i> , 2017 , 69, 1513-1518	15.4	4
59	Crystallographic and Morphological Evidence of Solid-Solid Interfacial Energy Anisotropy in the Sn-Zn Eutectic System. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020 , 51, 6387-6405	2.3	4

58	Size-dependent solubility and phase transformation behavior of SnO ₂ nanoparticles in an Al matrix. <i>Journal of Materials Science</i> , 2017 , 52, 5194-5207	4.3	3
57	Elastic and transparent bone as an electrochemical separator. <i>Materials Today Chemistry</i> , 2019 , 12, 132-138		3
56	Structure-Dependent Electrical and Magnetic Properties of Iron Oxide Composites. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1801004	1.6	3
55	Morphology control synthesis of Au@Cu ₂ S metal-semiconductor hybrid nanostructures by modulating reaction constituents. <i>RSC Advances</i> , 2015 , 5, 56629-56635	3.7	3
54	Role of Cu During Sintering of Fe _{0.96} Cu _{0.04} Nanoparticles. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 1410-1424	2.3	3
53	On the Structural Stability of Melt Spun Ribbons of Fe _{95-x} Zr _x B ₄ Cu ₁ (x = 7 and 9) Alloys and Correlation with Their Magnetic Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 560-571	2.3	3
52	Observation of Size-Dependent Electron-Phonon Scattering and Temperature-Dependent Photoluminescence Quenching in Triangular-Shaped Silver Nanoparticles. <i>Plasmonics</i> , 2016 , 11, 593-600	2.4	3
51	Subsurface deformation studies of aluminium during wear and its theoretical understanding using molecular dynamics. <i>Philosophical Magazine</i> , 2018 , 98, 2680-2700	1.6	3
50	Strain-controlled optical transmittance tuning of three-dimensional carbon nanotube architectures. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 1927-1933	7.1	3
49	Structural Evolution and Phase Stability of Hume-Rothery Phase in a Mechanically Driven Nanostructured Ag-15 at. pct Sn Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 1148-1160	2.3	3
48	In Situ Study of High-Temperature Mechanical Properties of Carbon Nanotube Scaffolds. <i>Microscopy and Microanalysis</i> , 2017 , 23, 782-783	0.5	3
47	Review of strategies toward the development of alloy two-dimensional (2D) transition metal dichalcogenides.. <i>IScience</i> , 2021 , 24, 103532	6.1	3
46	Electroreduction of Carbon Dioxide into Selective Hydrocarbons at Low Overpotential Using Isomorphic Atomic Substitution in Copper Oxide. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 179-189	8.3	3
45	Effect of Mn Addition on the Mechanical Properties of Al _{92.6} Si Alloy: Role of Al ₁₅ (MnFe) ₃ Si ₂ Intermetallic and Microstructure Modification. <i>Metals and Materials International</i> , 2021 , 27, 1713-1727	2.4	3
44	Thermodynamic modelling of the ternary Bi-Ga-Te system for potential application in thermoelectric materials. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2021 , 74, 102326	1.9	3
43	Highly Sensitive and Selective Triethylamine Sensing through High-Entropy Alloy (Ti-Zr-Cr-V-Ni) Nanoparticle-Induced Fermi Energy Control of MoS ₂ Nanosheets.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	3
42	3D Printed Materials in Water Treatment Applications. <i>Advanced Sustainable Systems</i> , 2022 , 6, 2100282	5.9	3
41	Ultra-low density three-dimensional nano-silicon carbide architecture with high temperature resistance and mechanical strength. <i>Carbon</i> , 2020 , 164, 143-149	10.4	2

40	Differences in the Mechanical Properties of Monolayer and Multilayer WSe ₂ /MoSe ₂ . <i>MRS Advances</i> , 2018 , 3, 373-378	0.7	2
39	New paradigm in advanced composite and nanocomposite design. <i>Reinforced Plastics</i> , 2018 , 62, 263-265	0.9	2
38	Effect of aluminum on the hyperfine field and crystallization behaviour of NANOPERM alloy. <i>Hyperfine Interactions</i> , 2008 , 183, 7-15	0.8	2
37	Influence of the mechanical and chemical thresholds on the microhardness of ternary chalcogenide glasses. <i>Physica Status Solidi (B): Basic Research</i> , 1996 , 197, 343-348	1.3	2
36	Nobel Metal Based High Entropy Alloy for Conversion of Carbon Dioxide (CO ₂) to Hydrocarbon		2
35	A Mechanistic Model to Estimate the Effect of Ladle Slag Entrainment on the Tundish Covering Slag Layer. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021 , 52, 1279-1293	2.5	2
34	On the effect of Ti addition on microstructural evolution, precipitate coarsening kinetics and mechanical properties in a Co ₃₀ Ni ₁₀ Al ₁₅ Mo ₂ Nb alloy. <i>Materialia</i> , 2021 , 16, 101072	3.2	2
33	Nature inspired solid-liquid phase amphibious adhesive. <i>Soft Matter</i> , 2020 , 16, 5854-5860	3.6	2
32	On the mechanical properties of atomic and 3D printed zeolite-templated carbon nanotube networks. <i>Additive Manufacturing</i> , 2021 , 37, 101628	6.1	2
31	A study of microbially fabricated bio-conjugated quantum dots for pico-molar sensing of HO and glucose. <i>Biomaterials Science</i> , 2021 , 9, 157-166	7.4	2
30	Current advances in bio-fabricated quantum dots emphasising the study of mechanisms to diversify their catalytic and biomedical applications. <i>Dalton Transactions</i> , 2021 , 50, 14062-14080	4.3	2
29	One Step Process for Infiltration of Magnetic Nanoparticles into CNT Arrays for Enhanced Field Emission. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701631	4.6	2
28	Flexure resistant 3D printed zeolite-inspired structures. <i>Additive Manufacturing</i> , 2021 , 47, 102297	6.1	2
27	Enhancement in magnetization of two-dimensional cobalt telluride and its magnetic field-assisted photocatalytic activity. <i>Applied Physics A: Materials Science and Processing</i> , 2022 , 128, 1	2.6	2
26	Photon and vibration synergism on planar defects induced 2D-graphitic carbon nitride for ultrafast remediation of dyes and antibiotic ampicillin. <i>Journal of Materials Science</i> , 2022 , 57, 8658-8675	4.3	2
25	Bioinspired Aluminum Composite Reinforced with Soft Polymers with Enhanced Strength and Plasticity. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901116	3.5	1
24	Anomalous Number Fluctuation Noise in Localized Transition Metal Dichalcogenide Layers: Generalization of McWhorter's Mechanism. <i>MRS Advances</i> , 2018 , 3, 299-305	0.7	1
23	2D Materials: Quaternary 2D Transition Metal Dichalcogenides (TMDs) with Tunable Bandgap (Adv. Mater. 35/2017). <i>Advanced Materials</i> , 2017 , 29,	24	1

22	Revisiting Quasicrystals for the Synthesis of 2D Metals. <i>Transactions of the Indian Institute of Metals</i> , 2022 , 75, 1093	1.2	1
21	Atomically thin gallium telluride nanosheets: A new 2D material for efficient broadband nonlinear optical devices. <i>Applied Physics Letters</i> , 2022 , 120, 021101	3.4	1
20	Macroscopic Mechanistic Modeling for the Prediction of Mold Slag Exposure in a Continuous Casting Mold. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2022 , 53, 1018	2.5	1
19	Pseudocapacitive TiNbO/reduced graphene oxide nanocomposite for high-rate lithium ion hybrid capacitors.. <i>Journal of Colloid and Interface Science</i> , 2021 , 610, 385-394	9.3	1
18	Real-time quality monitoring and organic pollutants degradation of water using atomically thin Magnesiochromite. <i>Materials Research Bulletin</i> , 2022 , 146, 111590	5.1	1
17	Improved mechanical and wear properties of Cu-Ga-In ternary alloys through liquid reinforcement. <i>Materials Today Communications</i> , 2021 , 27, 102409	2.5	1
16	2D nanomaterials in 3D/4D-printed biomedical devices. <i>Journal of Materials Research</i> ,1	2.5	1
15	3D Printing: 3D Printed Tubulanes as Lightweight Hypervelocity Impact Resistant Structures (Small 52/2019). <i>Small</i> , 2019 , 15, 1970284	11	1
14	Confinement Aided Simultaneous Water Cleaning and Energy Harvesting Using Atomically Thin Wurtzite (Wurtzene). <i>Advanced Sustainable Systems</i> , 2021 , 5, 2000189	5.9	1
13	Quaternary Alloys: Thermally Induced 2D Alloy-Heterostructure Transformation in Quaternary Alloys (Adv. Mater. 45/2018). <i>Advanced Materials</i> , 2018 , 30, 1870344	24	1
12	Conducting Graphene Synthesis from Electronic Waste. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	1
11	Microstructure-strength correlations in Al-Si-Cu alloys micro-alloyed with Zr. <i>Materialia</i> , 2022 , 101449	3.2	1
10	Mechanical Properties of Ultralow Density Graphene Oxide/Polydimethylsiloxane Foams. <i>MRS Advances</i> , 2018 , 3, 61-66	0.7	0
9	A Mathematical Model for Air Atomization of Molten Slag Based on Integral Conservation Equations. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2021 , 52, 4197	2.5	0
8	Stable nanocrystalline structure attainment and strength enhancement of Cu base alloy using bi-modal distributed tungsten dispersoids. <i>Philosophical Magazine</i> ,1-21	1.6	0
7	Ultrahigh transverse rupture strength in tungsten-based nanocomposites with minimal lattice misfit and dual microstructure. <i>International Journal of Refractory Metals and Hard Materials</i> , 2021 , 95, 105454	4.1	0
6	Thermodynamic Optimization of the Ternary Ga-Sn-Te System Using Modified Quasichemical Model. <i>Metals</i> , 2021 , 11, 1363	2.3	0
5	Microstructure and Wear Behaviour of a Novel Fe-Cr-V- C Plasma Transferred Arc Coating. <i>Jom</i> ,1	2.1	0

4	Laser welding of a W-free precipitation strengthened Co-base superalloy. <i>Journal of Materials Science</i> , 2022 , 57, 7085-7100	4.3	○
3	Synthesis and Characterization of Biotene: A New 2D Natural Oxide From Biotite. <i>Small</i> , 2020 , 16, 2201667	11	○
2	Determination of Optimum Process Parameters and Residual Stress in Friction Welding of Thixocast A356 Aluminum Alloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020 , 51, 3079-3088	2.5	
1	Interface chemistry of atomic-scale structures for building bioinspired 3D light-weight and porous architectures 2021 , 115-141		