

Zhong-Chang Wang

List of Publications by Year in Descending Order

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

287
papers

7,610
citations

50
h-index

70
g-index

292
ext. papers

9,096
ext. citations

7.2
avg, IF

6.36
L-index

#	Paper	IF	Citations
287	Particle size dependent Ag precipitation at different temperature and the resultant oxidation behavior of Cu-5Ag powders. <i>Advanced Powder Technology</i> , 2022 , 33, 103436	4.6	1
286	Latest advance on seamless metal-semiconductor contact with ultralow Schottky barrier in 2D-material-based devices. <i>Nano Today</i> , 2022 , 42, 101372	17.9	3
285	Novel intelligent devices: Two-dimensional materials based memristors. <i>Frontiers of Physics</i> , 2022 , 17, 1	3.7	0
284	Low-temperature and high-rate sodium metal batteries enabled by electrolyte chemistry. <i>Energy Storage Materials</i> , 2022 , 50, 47-54	19.4	3
283	Plasma boosted the conversion of waste plastics into liquid fuel by a peroxymonosulfate-hydrothermal process. <i>Chemical Engineering Journal</i> , 2022 , 137236	14.7	0
282	Recent progress and strategies in photodetectors based on 2D inorganic/organic heterostructures. <i>2D Materials</i> , 2021 , 8, 012001	5.9	5
281	Atomic structure, work function and magnetism in layered single crystal VOCl. <i>2D Materials</i> , 2021 , 8, 015027	5.9	7
280	Morphology-Tunable Synthesis of Intrinsic Room-Temperature Ferromagnetic FeO Nanoflakes. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 24051-24061	9.5	4
279	Role of sublimation kinetics of ammonia borane in chemical vapor deposition of uniform, large-area hexagonal boron nitride. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 042202	2.9	1
278	Engineering biocompatible TeSe nano-alloys as a versatile theranostic nanoplatform. <i>National Science Review</i> , 2021 , 8,	10.8	4
277	Facile fabrication of novel Ti3C2T _x -supported fallen leaf-like Bi2S3 nanopieces by a combined local-repulsion and macroscopic attraction strategy with enhanced symmetrical supercapacitor performance. <i>Electrochimica Acta</i> , 2021 , 366, 137406	6.7	11
276	Growth of 2D MoP single crystals on liquid metals by chemical vapor deposition. <i>Science China Materials</i> , 2021 , 64, 1182-1188	7.1	9
275	An Atomically Thin Air-Stable Narrow-Gap Semiconductor Cr2S3 for Broadband Photodetection with High Responsivity. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000962	6.4	9
274	Nanocomposite with fast Li ⁺ conducting percolation network: Solid polymer electrolyte with Li ⁺ non-conducting filler. <i>Nano Energy</i> , 2021 , 79, 105475	17.1	17
273	Strategies towards the challenges of zinc metal anode in rechargeable aqueous zinc ion batteries. <i>Energy Storage Materials</i> , 2021 , 35, 19-46	19.4	68
272	Plasma tailoring in WTe2 nanosheets for efficiently boosting hydrogen evolution reaction. <i>Journal of Materials Science and Technology</i> , 2021 , 78, 170-175	9.1	12
271	Interfacial optimization of PtNi octahedrons@Ti3C2MXene with enhanced alkaline hydrogen evolution activity and stability. <i>Applied Catalysis B: Environmental</i> , 2021 , 291, 120100	21.8	21

270	A high-voltage and high-capacity Ti ₃ C ₂ T _x /BiCuS _{2.5} heterostructure to boost up the energy density and recyclability of zinc-ion-hybrid capacitors. <i>Nano Energy</i> , 2021 , 87, 106136	17.1	6
269	Regulating the oxidation resistance of Cu-5Ag alloy by heat treatment. <i>Corrosion Science</i> , 2021 , 190, 109686	6.8	5
268	Engineering surface electron and active site at electrochemical sensing interface of CN vacancy-mediated Prussian blue analogue for analysis of heavy metal ions. <i>Applied Surface Science</i> , 2021 , 564, 150131	6.7	5
267	A novel Butter-sandwich Ti ₃ C ₂ T _x /PANI/PPY electrode with enhanced adsorption capacity and recyclability toward asymmetric capacitive deionization. <i>Separation and Purification Technology</i> , 2021 , 276, 119379	8.3	3
266	Atomically dispersed nonmagnetic electron traps improve oxygen reduction activity of perovskite oxides. <i>Energy and Environmental Science</i> , 2021 , 14, 1016-1028	35.4	28
265	Three-dimensional graphene and its composite for gas sensors. <i>Rare Metals</i> , 2021 , 40, 1494-1514	5.5	9
264	Ultrathin high-quality antimony oxide single crystals. <i>Nature Communications</i> , 2020 , 11, 2502	17.4	13
263	Hierarchically structured diamond composite with exceptional toughness. <i>Nature</i> , 2020 , 582, 370-374	50.4	59
262	Synthesis of Meta Symmetric 1T'WTe ₂ Using an Edge-Induced Mechanism. <i>Chinese Journal of Chemistry</i> , 2020 , 38, 709-713	4.9	1
261	Tunable Mechanical Property and Structural Transition of Silicon Nitride Nanowires Induced by Focused Ion Beam Irradiation. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32175-32181	9.5	
260	Acid-corrosion-formed amorphous phosphate surfaces improve electrochemical stability of LiNi _{0.80} Co _{0.15} Al _{0.05} O ₂ cathodes. <i>Corrosion Science</i> , 2020 , 168, 108553	6.8	11
259	Strong Electronic Coupling between Ultrafine Iridium/Ruthenium Nanoclusters and Conductive, Acid-Stable Tellurium Nanoparticle Support for Efficient and Durable Oxygen Evolution in Acidic and Neutral Media. <i>ACS Catalysis</i> , 2020 , 10, 3571-3579	13.1	54
258	Carbon free silicon/polyaniline hybrid anodes with 3D conductive structures for superior lithium-ion batteries. <i>Chemical Communications</i> , 2020 , 56, 2328-2331	5.8	20
257	Ultrafine-Grained Porous Ir-Based Catalysts for High-Performance Overall Water Splitting in Acidic Media. <i>ACS Applied Energy Materials</i> , 2020 , 3, 3736-3744	6.1	13
256	Milieu-Cr ₂ P ₆ -like Metal Phosphide Nanocrystals/Carbon Nanotube Film Composites as High-Capacitance Negative Electrodes in Asymmetric Supercapacitors. <i>ACS Applied Energy Materials</i> , 2020 , 3, 4580-4588	6.1	10
255	Grain Boundary Induced Ultralow Threshold Random Laser in a Single GaTe Flake. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 23323-23329	9.5	7
254	Enhanced out-of-plane thermoelectric performance of Cmcm SnSe phase by uniaxial strain. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020 , 384, 126002	2.3	7
253	Atomic structure and electronic property of two-dimensional ferroelectric CuInP ₂ Se ₆ . <i>Ceramics International</i> , 2020 , 46, 7014-7018	5.1	1

252	Strain-Induced Band-Gap Tuning of 2D-SnSSe Flakes for Application in Flexible Sensors. <i>Advanced Materials Technologies</i> , 2020 , 5, 1900853	6.8	10
251	Nanoscale precipitations in deformed dilute alloying Mg-Zn-Gd alloy. <i>Materials and Design</i> , 2020 , 196, 109122	8.1	15
250	Realizing Few-Layer Iodinene for High-Rate Sodium-Ion Batteries. <i>Advanced Materials</i> , 2020 , 32, e20048354	11.4	17
249	Electrically Stimulated Band Alignment Transit in Black Phosphorus/EGa ₂ O ₃ Heterostructure Dual-band Photodetector. <i>Chemical Research in Chinese Universities</i> , 2020 , 36, 703-708	2.2	3
248	Growth of NiSe ₂ , NiTe ₂ and alloy NiSe _{2-x} Te _x nanosheets with tunable shape evolution and chemical composition. <i>2D Materials</i> , 2020 , 7, 041001	5.9	7
247	Ultrafine oxygen-defective iridium oxide nanoclusters for efficient and durable water oxidation at high current densities in acidic media. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 24743-24751	13	13
246	Universal growth of ultra-thin III-V semiconductor single crystals. <i>Nature Communications</i> , 2020 , 11, 397917.4	17.4	12
245	High-performance junction field-effect transistor based on black phosphorus/EGa ₂ O ₃ heterostructure. <i>Journal of Semiconductors</i> , 2020 , 41, 082002	2.3	7
244	Peculiar spectra and photocurrent oscillation caused by laser interference in WX ₂ (X = S, Se) bubbles. <i>Journal of Materials Science</i> , 2020 , 55, 15857-15866	4.3	2
243	Point defects in two-dimensional hexagonal boron nitride: A perspective. <i>Journal of Applied Physics</i> , 2020 , 128, 100902	2.5	14
242	Activating Basal Planes of NiPS ₃ for Hydrogen Evolution by Nonmetal Heteroatom Doping. <i>Advanced Functional Materials</i> , 2020 , 30, 1908708	15.6	52
241	The n- and p-type thermoelectricity property of GeTe by first-principles study. <i>Journal of Alloys and Compounds</i> , 2019 , 810, 151838	5.7	5
240	Magnetism and Optical Anisotropy in van der Waals Antiferromagnetic Insulator CrOCl. <i>ACS Nano</i> , 2019 , 13, 11353-11362	16.7	46
239	Research on Biodegradable Mg-Zn-Gd Alloys for Potential Orthopedic Implants: In Vitro and in Vivo Evaluations. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 1623-1634	5.5	17
238	Effect of Twinning Behavior on Dynamic Recrystallization During Extrusion of AZ31 Mg Alloy. <i>Jom</i> , 2019 , 71, 1566-1573	2.1	14
237	A ternary SnSSe alloy for flexible broadband photodetectors.. <i>RSC Advances</i> , 2019 , 9, 14352-14359	3.7	4
236	High-Yield Electrochemical Production of Large-Sized and Thinly Layered NiPS Flakes for Overall Water Splitting. <i>Small</i> , 2019 , 15, e1902427	11	35
235	Fe-Doped ZnO/Reduced Graphene Oxide Nanocomposite with Synergic Enhanced Gas Sensing Performance for the Effective Detection of Formaldehyde. <i>ACS Omega</i> , 2019 , 4, 10252-10262	3.9	50

234	In-situ active formation of carbides coated with NPTiO nanoparticles for efficient adsorption-photocatalytic inactivation of harmful algae in eutrophic water. <i>Chemosphere</i> , 2019 , 228, 351-359	8.4	18
233	Silver Nanoparticles: In Situ Atomic-Scale Observation of Kinetic Pathways of Sublimation in Silver Nanoparticles (Adv. Sci. 8/2019). <i>Advanced Science</i> , 2019 , 6, 1970049	13.6	78
232	Strengthening and toughening by partial slip in nanotwinned diamond. <i>Carbon</i> , 2019 , 150, 1-7	10.4	14
231	A highly efficient TiOX (X = N and P) photocatalyst for inactivation of <i>Microcystis aeruginosa</i> under visible light irradiation. <i>Separation and Purification Technology</i> , 2019 , 222, 99-108	8.3	23
230	Phase Identification and Strong Second Harmonic Generation in Pure EInSe and Its Alloys. <i>Nano Letters</i> , 2019 , 19, 2634-2640	11.5	50
229	In Situ Atomic-Scale Observation of Kinetic Pathways of Sublimation in Silver Nanoparticles. <i>Advanced Science</i> , 2019 , 6, 1802131	13.6	16
228	2D/2D Electrical Contacts in the Monolayer WSe2 Transistors: A First-Principles Study. <i>ACS Applied Nano Materials</i> , 2019 , 2, 2796-2805	5.6	11
227	Competing Interface and Bulk Effect-Driven Magnetoelectric Coupling in Vertically Aligned Nanocomposites. <i>Advanced Science</i> , 2019 , 6, 1901000	13.6	17
226	Atomic-scale dynamic observation reveals temperature-dependent multistep nucleation pathways in crystallization. <i>Nanoscale Horizons</i> , 2019 , 4, 1302-1309	10.8	8
225	Inverted Pyramid Textured p-Silicon Covered with Co2P as an Efficient and Stable Solar Hydrogen Evolution Photocathode. <i>ACS Energy Letters</i> , 2019 , 4, 1755-1762	20.1	18
224	Air-Induced Degradation and Electrochemical Regeneration for the Performance of Layered Ni-Rich Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 44036-44045	9.5	28
223	Metallic interface induced by electronic reconstruction in crystalline-amorphous bilayer oxide films. <i>Science Bulletin</i> , 2019 , 64, 1567-1572	10.6	0
222	Nanowire Quantum Dot Surface Engineering for High Temperature Single Photon Emission. <i>ACS Nano</i> , 2019 , 13, 13492-13500	16.7	13
221	Nanoscale magnetization inhomogeneity within single phase nanopillars. <i>Physical Review Materials</i> , 2019 , 3,	3.2	3
220	Synthesis of low-symmetry 2D GeSnSe alloy flakes with anisotropic optical response and birefringence. <i>Nanoscale</i> , 2019 , 11, 23116-23125	7.7	5
219	Highly Sensitive Polarization Photodetection Using a Pseudo-One-Dimensional NbTi S Alloy. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3342-3350	9.5	26
218	Microstructure and Mechanical Properties of AZ31 Mg Alloy Fabricated by Pre-compression and Frustum Shearing Extrusion. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 235-244	2.5	10
217	Vanadium Doping Enhanced Electrochemical Performance of Molybdenum Oxide in Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019 , 29, 1805227	15.6	43

216	Disassembly of 2D Vertical Heterostructures. <i>Advanced Materials</i> , 2019 , 31, e1805976	24	8
215	Few-Layer Bismuthene with Anisotropic Expansion for High-Areal-Capacity Sodium-Ion Batteries. <i>Advanced Materials</i> , 2019 , 31, e1807874	24	98
214	Adsorption-photocatalysis functional expanded graphite C/C composite for in-situ photocatalytic inactivation of <i>Microcystis aeruginosa</i> . <i>Chemical Engineering Journal</i> , 2018 , 341, 516-525	14.7	50
213	Carbon-based catalysts by structural manipulation with iron for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8405-8412	13	33
212	Direct Atomic-Scale Observation of Intermediate Pathways of Melting and Crystallization in Supported Bi Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 961-969	6.4	16
211	Surface modified TiO floating photocatalyst with PDDA for efficient adsorption and photocatalytic inactivation of <i>Microcystis aeruginosa</i> . <i>Water Research</i> , 2018 , 131, 320-333	12.5	55
210	Self-Assembled Biomolecular 1D Nanostructures for Aqueous Sodium-Ion Battery. <i>Advanced Science</i> , 2018 , 5, 1700634	13.6	82
209	Structural stability, electronic structures and enhanced photocatalytic properties of BiF ₃ nanowires: A first-principles study. <i>Ceramics International</i> , 2018 , 44, 9623-9632	5.1	5
208	Precipitation of secondary phase in Mg-Zn-Gd alloy after room-temperature deformation and annealing. <i>Journal of Materials Research and Technology</i> , 2018 , 7, 135-141	5.5	15
207	Atomic disorders in layer structured topological insulator SnBi ₂ Te ₄ nanoplates. <i>Nano Research</i> , 2018 , 11, 696-706	10	8
206	In-Plane Optical Anisotropy and Linear Dichroism in Low-Symmetry Layered TlSe. <i>ACS Nano</i> , 2018 , 12, 8798-8807	16.7	43
205	In Situ Atomic-Scale Study of Particle-Mediated Nucleation and Growth in Amorphous Bismuth to Nanocrystal Phase Transformation. <i>Advanced Science</i> , 2018 , 5, 1700992	13.6	52
204	Simulation of magnetoelastic response of iron nanowire loop. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018 , 493, 384-399	3.3	
203	Effects of Carbon and Boron on Structure and Properties of Austenitic Stainless Steel Coatings Fabricated by Laser Remanufacturing. <i>Steel Research International</i> , 2018 , 90, 1800473	1.6	3
202	Growth of 2D GaN Single Crystals on Liquid Metals. <i>Journal of the American Chemical Society</i> , 2018 , 140, 16392-16395	16.4	110
201	Recent advances of low-dimensional materials in lasing applications. <i>FlatChem</i> , 2018 , 10, 22-38	5.1	12
200	Fabrication of ultra-high strength magnesium alloys over 540 MPa with low alloying concentration by double continuously extrusion. <i>Journal of Magnesium and Alloys</i> , 2018 , 6, 107-113	8.8	20
199	Electronic structure and magnetism in transition metal doped InSe monolayer: A GGA + U study. <i>Ceramics International</i> , 2018 , 44, 15912-15917	5.1	12

198	CeOx/TiO2-yFy nanocomposite: An efficient electron and oxygen tuning mechanism for photocatalytic inactivation of water-bloom algae. <i>Ceramics International</i> , 2018 , 44, 19151-19159	5.1	12
197	Synthesis, characterization and frictional wear behavior of ceria hybrid architectures with {111} exposure planes. <i>Applied Surface Science</i> , 2017 , 401, 100-105	6.7	15
196	Atomic structures and electronic properties of interfaces between aluminum and carbides/nitrides: A first-principles study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017 , 89, 15-20	3	17
195	Synthesis of WO 3 microfibers and their optical properties. <i>Ceramics International</i> , 2017 , 43, 7048-7056	5.1	14
194	Hydrothermal synthesis and photocatalytic properties of WO 3 nanorods by using capping agent SnCl 4 BH 2 O. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017 , 92, 12-16	3	7
193	Room temperature magnetoresistance effects in ferroelectric poly(vinylidene fluoride) spin valves. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 5055-5062	7.1	31
192	Strain rate dependence of tension and compression behavior in nano-polycrystalline vanadium nitride. <i>Ceramics International</i> , 2017 , 43, 11635-11641	5.1	22
191	Atomic structure, electronic properties and generalized stacking fault energy of diamond/c-BN multilayer. <i>RSC Advances</i> , 2017 , 7, 29599-29605	3.7	5
190	In Situ Atomic-Scale Observation of Droplet Coalescence Driven Nucleation and Growth at Liquid/Solid Interfaces. <i>ACS Nano</i> , 2017 , 11, 5590-5597	16.7	26
189	Regulating twin boundary mobility by annealing in magnesium and its alloys. <i>International Journal of Plasticity</i> , 2017 , 99, 1-18	7.6	44
188	In-plane anisotropy and twin boundary effects in vanadium nitride under nanoindentation. <i>Scientific Reports</i> , 2017 , 7, 4768	4.9	16
187	Effects of Helium Ion Irradiation on Properties of Crystalline and Amorphous Multiphase Ceramic Coatings. <i>Journal of Materials Engineering and Performance</i> , 2017 , 26, 4131-4137	1.6	1
186	Deformation behavior and texture randomization of MgZnCd alloys reinforced with icosahedral quasicrystal. <i>International Journal of Materials Research</i> , 2017 , 108, 455-464	0.5	2
185	Transparent magnetic semiconductor with embedded metallic glass nano-granules. <i>Materials and Design</i> , 2017 , 132, 208-214	8.1	12
184	Impact of solute elements on detwinning in magnesium and its alloys. <i>International Journal of Plasticity</i> , 2017 , 91, 134-159	7.6	64
183	Molecular dynamics simulation of nano-indentation on Ti-V multilayered thin films. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017 , 87, 213-219	3	14
182	Molecular dynamics simulation of plasticity in VN(001) crystals under nanoindentation with a spherical indenter. <i>Applied Surface Science</i> , 2017 , 392, 942-949	6.7	52
181	Double extrusion of Mg-Al-Zn alloys. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 89, 869-875	3.2	5

180	Designing biocompatible Ti-based amorphous thin films with no toxic element. <i>Journal of Alloys and Compounds</i> , 2017 , 707, 142-147	5.7	7
179	Microtexture and Nanoindentation of β and γ Phases in Ti ₆₀ Al ₁₀ .5Cr ₁₀ .5Mo ₁₀ .5Fe ₁₀ .3Si Titanium Alloy. <i>Science of Advanced Materials</i> , 2017 , 9, 1476-1483	2.3	3
178	Synthesis of boron nitride nanosheets with a few atomic layers and their gas-sensing performance. <i>Ceramics International</i> , 2016 , 42, 971-975	5.1	35
177	Molecular dynamics simulation of nanoindentation on Cu/Ni nanotwinned multilayer films using a spherical indenter. <i>Scientific Reports</i> , 2016 , 6, 35665	4.9	91
176	Real-Time Dynamical Observation of Lattice Induced Nucleation and Growth in Interfacial Solid-Solid Phase Transitions. <i>Crystal Growth and Design</i> , 2016 , 16, 7256-7262	3.5	14
175	Secondary dislocation structures in a Ni ₃ Al system from the GMS and O-lattice theory. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2016 , 77, 97-101	3	4
174	Impurity-induced ferromagnetism and metallicity of WS ₂ monolayer. <i>Ceramics International</i> , 2016 , 42, 2364-2369	5.1	17
173	Assembly of 2D nanosheets into 3D flower-like NiO: Synthesis and the influence of petal thickness on gas-sensing properties. <i>Ceramics International</i> , 2016 , 42, 4567-4573	5.1	63
172	Gas-sensing properties and mechanisms of Cu-doped SnO ₂ spheres towards H ₂ S. <i>Ceramics International</i> , 2016 , 42, 10006-10013	5.1	26
171	Molecular dynamics simulation of deformation twin in rocksalt vanadium nitride. <i>Journal of Alloys and Compounds</i> , 2016 , 675, 128-133	5.7	35
170	Molecular dynamics simulation of effects of twin interfaces on Cu/Ni multilayers. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 658, 1-7	5.3	48
169	Atomic-Scale Structure and Local Chemistry of CoFeB-MgO Magnetic Tunnel Junctions. <i>Nano Letters</i> , 2016 , 16, 1530-6	11.5	69
168	Synthesis and luminescence properties of three dimensional architectures of nanostructural WO ₃ . <i>Optik</i> , 2016 , 127, 3454-3458	2.5	6
167	MD simulation of effect of crystal orientations and substrate temperature on growth of Cu/Ni bilayer films. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	21
166	Composite of ZnO spheres and functionalized SnO ₂ nanofibers with an enhanced ethanol gas sensing properties. <i>Materials Letters</i> , 2016 , 169, 246-249	3.3	12
165	Nanosheet-assembled hierarchical SnO ₂ nanostructures for efficient gas-sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2016 , 231, 120-128	8.5	79
164	Facile synthesis of groove-like NiMoO ₄ hollow nanorods for high-performance supercapacitors. <i>Applied Surface Science</i> , 2016 , 360, 234-239	6.7	42
163	Hydrothermal synthesis and characterization of novel Sn ₂ O ₃ hierarchical nanostructures. <i>Materials Letters</i> , 2016 , 165, 235-238	3.3	8

162	Dislocations in icosahedral quasicrystalline phase embedded in hot-deformed Mg alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 658, 483-487	5.7	7
161	Enhancing ethanol detection by heterostructural silver nanoparticles decorated polycrystalline zinc oxide nanosheets. <i>Ceramics International</i> , 2016 , 42, 3138-3144	5.1	23
160	A room-temperature magnetic semiconductor from a ferromagnetic metallic glass. <i>Nature Communications</i> , 2016 , 7, 13497	17.4	48
159	Ultrahigh Oxidation Resistance and High Electrical Conductivity in Copper-Silver Powder. <i>Scientific Reports</i> , 2016 , 6, 39650	4.9	23
158	Molecular dynamics simulation of nano-indentation of (111) cubic boron nitride with optimized Tersoff potential. <i>Applied Surface Science</i> , 2016 , 382, 309-315	6.7	26
157	Planar Vacancies in Sn _{1-x} Bi _x Te Nanoribbons. <i>ACS Nano</i> , 2016 , 10, 5507-15	16.7	15
156	Spin conserved electron transport behaviors in fullerenes (C ₆₀ and C ₇₀) spin valves. <i>Carbon</i> , 2016 , 106, 202-207	10.4	20
155	AgAl alloy electrode for efficient perovskite solar cells. <i>RSC Advances</i> , 2015 , 5, 56037-56044	3.7	19
154	Quasi-one-dimensional metal-oxide-based heterostructural gas-sensing materials: A review. <i>Sensors and Actuators B: Chemical</i> , 2015 , 221, 1570-1585	8.5	171
153	Effect of the sheet thickness of hierarchical SnO ₂ on the gas sensing performance. <i>Applied Surface Science</i> , 2015 , 355, 631-637	6.7	22
152	First-principles calculations of the twin boundary energies and adhesion energies of interfaces for cubic face-centered transition-metal nitrides and carbides. <i>Applied Surface Science</i> , 2015 , 355, 1132-1135	6.7	20
151	Growth-controlled NiCo ₂ S ₄ nanosheet arrays with self-decorated nanoneedles for high-performance pseudocapacitors. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17652-17658	13	97
150	Bulk metallic glassy surface native oxide: Its atomic structure, growth rate and electrical properties. <i>Acta Materialia</i> , 2015 , 97, 282-290	8.4	36
149	Molecular dynamics simulation of TiN (001) thin films under indentation. <i>Ceramics International</i> , 2015 , 41, 14078-14086	5.1	42
148	Effects of different petal thickness on gas sensing properties of flower-like WO ₃ H ₂ O hierarchical architectures. <i>Applied Surface Science</i> , 2015 , 347, 73-78	6.7	60
147	Template effect in TiN/AlN multilayered coatings from first principles. <i>Ceramics International</i> , 2015 , 41, 10095-10101	5.1	18
146	PEG-20000 assisted hydrothermal synthesis of hierarchical ZnO flowers: Structure, growth and gas sensor properties. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015 , 73, 163-168	3	13
145	Atomistic mechanisms of nonstoichiometry-induced twin boundary structural transformation in titanium dioxide. <i>Nature Communications</i> , 2015 , 6, 7120	17.4	77

144	Magnetolectric quasi-(0-3) nanocomposite heterostructures. <i>Nature Communications</i> , 2015 , 6, 6680	17.4	77
143	Synthesis of carbon fiber@nickel oxide nanosheet core@shells for high-performance supercapacitors. <i>RSC Advances</i> , 2015 , 5, 84238-84244	3.7	11
142	Enhancement of NH ₃ sensing performance in flower-like ZnO nanostructures and their growth mechanism. <i>Applied Surface Science</i> , 2015 , 357, 31-36	6.7	16
141	Two-dimensional electron gas at the Ti-diffused BiFeO ₃ /SrTiO ₃ interface. <i>Applied Physics Letters</i> , 2015 , 107, 031601	3.4	33
140	Patterning Oxide Nanopillars at the Atomic Scale by Phase Transformation. <i>Nano Letters</i> , 2015 , 15, 6469-6475	17.4	11
139	A Single-Atom-Thick TiO ₂ Nanomesh on an Insulating Oxide. <i>ACS Nano</i> , 2015 , 9, 8766-72	16.7	24
138	Molecular dynamics simulation of VN thin films under indentation. <i>Applied Surface Science</i> , 2015 , 357, 643-650	6.7	58
137	Secondary phases in quasicrystal-reinforced Mg _{0.5} Zn _{0.6} Gd Mg alloy. <i>Materials Characterization</i> , 2015 , 108, 132-136	3.9	13
136	Molecular dynamics simulation of the slip systems in VN. <i>RSC Advances</i> , 2015 , 5, 77831-77838	3.7	28
135	Regulating the coarsening of the γ phase in superalloys. <i>NPG Asia Materials</i> , 2015 , 7, e212-e212	10.3	39
134	MD simulation of growth of Pd on Cu (1 1 1) and Cu on Pd (1 1 1) substrates. <i>Applied Surface Science</i> , 2015 , 356, 651-658	6.7	19
133	HAADF STEM observation of the Au/CeO ₂ nanostructures. <i>Materials Letters</i> , 2015 , 141, 31-34	3.3	5
132	On the Periodicity of $\langle 001 \rangle$; Symmetrical Tilt Grain Boundaries. <i>Materials Transactions</i> , 2015 , 56, 281-287	1.3	11
131	The Decomposition Formula of $\langle 001 \rangle$; Symmetrical Tilt Grain Boundaries. <i>Materials Transactions</i> , 2015 , 56, 1945-1952	1.3	7
130	Spectroscopy Applied to Engineering Materials. <i>Journal of Spectroscopy</i> , 2015 , 2015, 1-2	1.5	
129	Atomic-scale observation of dynamical fluctuation and three-dimensional structure of gold clusters. <i>Journal of Applied Physics</i> , 2015 , 117, 085303	2.5	18
128	Pseudo-binary electrolyte, LiBH ₄ -LiCl, for bulk-type all-solid-state lithium-sulfur battery. <i>Nanotechnology</i> , 2015 , 26, 254001	3.4	51
127	Misfit accommodation mechanism at the heterointerface between diamond and cubic boron nitride. <i>Nature Communications</i> , 2015 , 6, 6327	17.4	54

126	Hydrothermal synthesis of ZnO microcakes assembled by octahedrons and their gas-sensing property. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 9529-9534	2.1	1
125	MD simulation of nanoindentation on (001) and (111) surfaces of Ag/Ni multilayers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015 , 74, 481-488	3	31
124	A dewetting route to grow heterostructured nanoparticles based on thin film heterojunctions. <i>Nanoscale</i> , 2015 , 7, 19977-84	7.7	3
123	First-principles study of atomic structure and electronic properties of Si and F doped anatase TiO ₂ . <i>Materials Science-Poland</i> , 2015 , 33, 549-554	0.6	10
122	Modification of grain refinement and texture in AZ31 Mg alloy by a new plastic deformation method. <i>Journal of Alloys and Compounds</i> , 2015 , 628, 130-134	5.7	42
121	First-principles study of negative thermal expansion mechanism in A-site-ordered perovskite SrCu ₃ Fe ₄ O ₁₂ . <i>RSC Advances</i> , 2015 , 5, 1801-1807	3.7	9
120	A dislocation core in titanium dioxide and its electronic structure. <i>RSC Advances</i> , 2015 , 5, 18506-18510	3.7	18
119	First-principles investigation of electronic and magnetic properties of double perovskite CaFeTi ₂ O ₆ . <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015 , 69, 133-137	3	5
118	Atomistic origin of an ordered superstructure induced superconductivity in layered chalcogenides. <i>Nature Communications</i> , 2015 , 6, 6091	17.4	32
117	Enhanced damping capacity of magnesium alloys by tensile twin boundaries. <i>Scripta Materialia</i> , 2015 , 101, 8-11	5.6	65
116	First-principles calculation and molecular dynamics simulation of fracture behavior of VN layers under uniaxial tension. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015 , 69, 224-231	3	22
115	Single adatom dynamics at monatomic steps of free-standing few-layer reduced graphene. <i>Scientific Reports</i> , 2014 , 4, 6037	4.9	10
114	Merging of Kirkendall growth and Ostwald ripening: CuO@MnO ₂ core-shell architectures for asymmetric supercapacitors. <i>Scientific Reports</i> , 2014 , 4, 4518	4.9	199
113	Synthesis and growth mechanism of CuO nanostructures and their gas sensing properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 2041-2046	2.1	10
112	Recognition of carbon monoxide with SnO ₂ /Ti thick-film sensor and its gas-sensing mechanism. <i>Sensors and Actuators B: Chemical</i> , 2014 , 191, 1-8	8.5	41
111	Controllable Synthesis of Ceria Nanoparticles with Uniform Reactive {100} Exposure Planes. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 4437-4443	3.8	28
110	Polymorphism of dislocation core structures at the atomic scale. <i>Nature Communications</i> , 2014 , 5, 3239	17.4	78
109	Atomic structures and electronic properties of 2H-NbSe ₂ : The impact of Ti doping. <i>Journal of Applied Physics</i> , 2014 , 116, 103709	2.5	7

108	Atomic structures and electronic properties of Ta-doped 2H-NbSe ₂ . <i>RSC Advances</i> , 2014 , 4, 57541-57546	3.7	5
107	Full determination of individual reconstructed atomic columns in intermixed heterojunctions. <i>Nano Letters</i> , 2014 , 14, 6584-9	11.5	1
106	Improvement of the piezoelectric properties of PVDF-HFP using AgNWs. <i>RSC Advances</i> , 2014 , 4, 35896-35903	3.7	35
105	Synthesis and atomic-scale characterization of CeO ₂ nano-octahedrons. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014 , 64, 218-223	3	11
104	Interfacial defect complex at the MgO/SrTiO ₃ heterojunction and its electronic impact. <i>RSC Advances</i> , 2014 , 4, 51002-51007	3.7	9
103	Nanoepitaxy of Anatase-type TiO ₂ on CeO ₂ Nanocubes Self-Assembled on a Si Substrate for Fabricating Well-Aligned Nanoscale Heterogeneous Interfaces. <i>Crystal Growth and Design</i> , 2014 , 14, 4714-4720	4.5	4
102	Tensile and fracture process of the TiN/VN interface from first principles. <i>Ceramics International</i> , 2014 , 40, 14453-14462	5.1	31
101	Facile synthesis of ceria nanospheres by Ce(OH)CO ₃ precursors. <i>Materials Letters</i> , 2014 , 122, 90-93	3.3	26
100	Hydrothermal synthesis and gas-sensing properties of ultrathin hexagonal ZnO nanosheets. <i>Ceramics International</i> , 2014 , 40, 2295-2298	5.1	62
99	Hydrothermal synthesis of hierarchical flower-like SnO ₂ nanostructures with enhanced ethanol gas sensing properties. <i>Materials Research Bulletin</i> , 2014 , 57, 91-96	5.1	62
98	Formation mechanism of quasicrystals at the nanoscale during hot compression of Mg alloys. <i>Scripta Materialia</i> , 2014 , 78-79, 61-64	5.6	18
97	Microstructure and mechanical property of TiN/AlN multilayered coatings: The impact of AlN thickness. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014 , 63, 125-130	3	13
96	Nanoscale icosahedral quasicrystal phase precipitation mechanism during annealing for MgZnCd-based alloys. <i>Materials Letters</i> , 2014 , 130, 236-239	3.3	18
95	Fluorine in shark teeth: its direct atomic-resolution imaging and strengthening function. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 1543-7	16.4	22
94	Atomic-scale observation of migration and coalescence of Au nanoclusters on YSZ surface by aberration-corrected STEM. <i>Scientific Reports</i> , 2014 , 4, 5521	4.9	25
93	Atomic-scale structure and properties of highly stable antiphase boundary defects in FeO. <i>Nature Communications</i> , 2014 , 5, 5740	17.4	86
92	Improved piezoelectricity of PVDF-HFP/carbon black composite films. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 135302	3	54
91	Development and Fabrication of Advanced Materials for Energy and Environment Applications 2014. <i>Journal of Nanomaterials</i> , 2014 , 2014, 1-2	3.2	

90	Atomic and electronic structure of the SrNbO ₃ /SrNbO _{3.4} interface. <i>Applied Physics Letters</i> , 2014 , 105, 221602	3.4	15
89	Engineering one-dimensional and two-dimensional birnessite manganese dioxides on nickel foam-supported cobalt/aluminum layered double hydroxides for advanced binder-free supercapacitors. <i>RSC Advances</i> , 2014 , 4, 63901-63908	3.7	19
88	Selective impurity segregation at a near- Σ grain boundary in MgO. <i>Journal of Materials Science</i> , 2014 , 49, 3956-3961	4.3	11
87	Synthesis and Controllable Growth of Three-Dimensional WS ₂ with Different Morphologies. <i>Nanoscience and Nanotechnology Letters</i> , 2014 , 6, 1087-1090	0.8	2
86	Local atomic structure of a near-sigma 5 tilt grain boundary in MgO. <i>Journal of Materials Science</i> , 2013 , 48, 5470-5474	4.3	13
85	Hydrothermal synthesis of ultrathin ZnO nanosheets and their gas-sensing properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 1764-1769	2.1	12
84	Effect of Icosahedral Quasicrystalline Fraction and Extrusion Ratio on Microstructure, Mechanical Properties, and Anisotropy of Mg-Zn-Gd-Based Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 2725-2734	2.3	15
83	Excellent mechanical properties of an ultrafine-grained quasicrystalline strengthened magnesium alloy with multi-modal microstructure. <i>Materials Letters</i> , 2013 , 107, 181-184	3.3	18
82	Synthesis and characterization of CeO ₂ nano-rods. <i>Ceramics International</i> , 2013 , 39, 6607-6610	5.1	47
81	Atomic-scale structure and electronic property of the La ₂ FeCrO ₆ /SrTiO ₃ interface. <i>Journal of Applied Physics</i> , 2013 , 114, 113705	2.5	2
80	Hydrothermal synthesis of ceria hybrid architectures of nano-rods and nano-octahedrons. <i>Materials Letters</i> , 2013 , 96, 210-213	3.3	10
79	Magnetic coupling mechanism in A-site ordered perovskite YMn ₃ Al ₄ O ₁₂ : Extended (Mn ²⁺)(O ²⁻ Mn) superexchange. <i>Solid State Sciences</i> , 2013 , 17, 63-66	3.4	1
78	Effect of pretreatment and annealing on microstructure and mechanical properties of Mg _{0.5} Zn _{0.25} Gd (at%) alloys reinforced with quasicrystal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 581, 73-82	5.3	18
77	Rapid selective detection of formaldehyde by hollow ZnSnO ₃ nanocages. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2013 , 48, 46-52	3	20
76	Hollow, porous, and yttrium functionalized ZnO nanospheres with enhanced gas-sensing performances. <i>Sensors and Actuators B: Chemical</i> , 2013 , 178, 53-62	8.5	72
75	Spontaneous structural distortion and quasi-one-dimensional quantum confinement in a single-phase compound. <i>Advanced Materials</i> , 2013 , 25, 218-22	24	8
74	Ferromagnetic dislocations in antiferromagnetic NiO. <i>Nature Nanotechnology</i> , 2013 , 8, 266-70	28.7	104
73	Impact of NaF mineralizer on cerium-containing nanoparticles synthesized by hydrothermal process. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2013 , 48, 181-186	3	4

72	Atomic and electronic structure of La ₂ CoMnO ₆ on SrTiO ₃ and LaAlO ₃ substrates from first principles. <i>Journal of Applied Physics</i> , 2013 , 113, 203704	2.5	6
71	Regulating infrared photoresponses in reduced graphene oxide phototransistors by defect and atomic structure control. <i>ACS Nano</i> , 2013 , 7, 6310-20	16.7	89
70	Hierarchical ZnO porous microspheres and their gas-sensing properties. <i>Ceramics International</i> , 2013 , 39, 5919-5924	5.1	14
69	Microstructures and grain boundaries of cubic boron nitrides. <i>Diamond and Related Materials</i> , 2013 , 32, 27-31	3.5	16
68	Geometrically Controlled Nanoporous PdAu Bimetallic Catalysts with Tunable Pd/Au Ratio for Direct Ethanol Fuel Cells. <i>ACS Catalysis</i> , 2013 , 3, 1220-1230	13.1	129
67	Hydrothermal synthesis of ZnSe:Cu quantum dots and their luminescent mechanism study by first-principles. <i>Journal of Luminescence</i> , 2013 , 143, 185-192	3.8	16
66	Facile synthesis of hybrid hexagonal CeF ₃ nano-disks on CeO ₂ frustum pyramids. <i>Materials Letters</i> , 2013 , 92, 7-10	3.3	14
65	Oxygen segregation at coherent grain boundaries of cubic boron nitride. <i>Applied Physics Letters</i> , 2013 , 102, 091607	3.4	4
64	Influence of High-Frequency Micro-Forging on Microstructure and Properties of 304 Stainless Steel Fabricated by Laser Rapid Prototyping. <i>Steel Research International</i> , 2013 , 84, 870-877	1.6	9
63	Atomistic geometry and bonding characteristics at the Sr ₂ FeTaO ₆ /SrTiO ₃ interface. <i>Applied Physics Letters</i> , 2013 , 102, 221602	3.4	1
62	Deformation and fracture behavior of hot extruded Mg alloys AZ31. <i>Materials Characterization</i> , 2012 , 67, 93-100	3.9	42
61	Double change channel angular pressing of magnesium alloys AZ31. <i>Materials & Design</i> , 2012 , 35, 138-143		17
60	Microstructure and corrosion behavior of AZ31 alloys prepared by dual directional extrusion. <i>Materials & Design</i> , 2012 , 36, 687-693		14
59	Effect of annealing on microstructure evolution and mechanical property of cold forged magnesium pipes. <i>Materials & Design</i> , 2012 , 39, 131-139		11
58	The effect of nanoquasicrystals on mechanical properties of as-extruded Mg ₇₀ Zn ₃₀ alloy. <i>Materials Letters</i> , 2012 , 79, 281-283	3.3	33
57	Impact of Nb doping on gas-sensing performance of TiO ₂ thick-film sensors. <i>Sensors and Actuators B: Chemical</i> , 2012 , 166-167, 141-149	8.5	60
56	Gas-sensing performance enhancement in ZnO nanostructures by hierarchical morphology. <i>Sensors and Actuators B: Chemical</i> , 2012 , 166-167, 492-499	8.5	128
55	Effect of sintering aids on the electrical properties of Ce _{0.9} Nd _{0.1} O ₂ . <i>Solid State Sciences</i> , 2012 , 14, 805-808	3.4	12

54	Enhanced gas sensing properties by SnO ₂ nanosphere functionalized TiO ₂ nanobelts. <i>Journal of Materials Chemistry</i> , 2012 , 22, 3544		152
53	Electrical conductivity optimization in electrolyte-free fuel cells by single-component Ce _{0.8} Sm _{0.2} O ₂ -Ti _{0.15} Ni _{0.45} Zn _{0.4} layer. <i>RSC Advances</i> , 2012 , 2, 3828	3.7	53
52	A-Site-Doping Enhanced B-Site Ordering and Correlated Magnetic Property in La _{2-x} BixCoMnO ₆ . <i>Journal of Physical Chemistry C</i> , 2012 , 116, 16841-16847	3.8	38
51	Microstructural study of forged magnesium pipes at room temperature. <i>Materials Science and Technology</i> , 2012 , 28, 1269-1275	1.5	3
50	Impact of residual stress on the adhesion and tensile fracture of TiN/CrN multi-layered coatings from first principles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012 , 44, 1838-1845	3	19
49	Electrical properties optimization of calcium Co-doping system: CeO ₂ Bm ₂ O ₃ . <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 11934-11940	6.7	7
48	Synthesis of unique ZnO/SnO ₂ core-shell structural microspheres and their gas-sensing properties. <i>Materials Letters</i> , 2012 , 89, 5-8	3.3	18
47	Adhesion, atomic structure, and bonding variation at TiN/VN interface by chemical segregation. <i>Surface and Interface Analysis</i> , 2012 , 44, 1261-1270	1.5	6
46	Insulator-metal transition driven by pressure and B-site disorder in double perovskite La ₂ CoMnO ₆ . <i>Journal of Computational Chemistry</i> , 2012 , 33, 1433-9	3.5	15
45	Terraces at ohmic contact in SiC electronics: Structure and electronic states. <i>Journal of Applied Physics</i> , 2012 , 111, 113717	2.5	8
44	Structural and electronic impact of SrTiO ₃ substrate on TiO ₂ thin films. <i>Journal of Materials Science</i> , 2012 , 47, 5148-5157	4.3	11
43	Thermally diffused antimony and zinc coatings on magnesium alloys AZ31. <i>Surface Engineering</i> , 2012 , 28, 382-386	2.6	9
42	B-site ordering induced suppression of magnetic cluster glass and dielectric anomaly in La _{2-x} BixCoMnO ₆ . <i>Applied Physics Letters</i> , 2012 , 100, 222907	3.4	11
41	Mechanism of A-B intersite charge transfer and negative thermal expansion in A-site-ordered perovskite LaCu ₃ Fe ₄ O ₁₂ . <i>Journal of Applied Physics</i> , 2012 , 111, 103718	2.5	15
40	Atom-resolved imaging of ordered defect superstructures at individual grain boundaries. <i>Nature</i> , 2011 , 479, 380-3	50.4	194
39	Quantifying adhesion energy of mechanical coatings at atomistic scale. <i>Applied Surface Science</i> , 2011 , 258, 1451-1455	6.7	7
38	Introducing Ohmic Contacts into Silicon Carbide Technology 2011 ,		1
37	Heterointerfaces: atomic structures, electronic states, and related properties. <i>Journal of the Ceramic Society of Japan</i> , 2011 , 119, 783-793	1	7

36	Gas-sensing property improvement of ZnO by hierarchical flower-like architectures. <i>Materials Letters</i> , 2011 , 65, 3384-3387	3.3	57
35	PREDICTION OF RESIDUAL STRESS IN MULTILAYERED COATINGS WITH A LINEARLY ELASTIC MODEL INCORPORATING DENSITY FUNCTIONAL THEORY CALCULATIONS. <i>Journal of Multiscale Modeling</i> , 2011 , 03, 65-78	0.8	5
34	Strain control of orbital polarization and correlated metal-insulator transition in La ₂ CoMnO ₆ from first principles. <i>Applied Physics Letters</i> , 2011 , 99, 202110	3.4	18
33	Modulated Na ₂ Ti ₄ O ₉ :Zr Nanobelt via Site-Specific Zr Doping. <i>Applied Physics Express</i> , 2011 , 4, 085003	2.4	3
32	Atomic-scale Ti ₃ SiC ₂ bilayers embedded in SiC: Formation of point Fermi surface. <i>Applied Physics Letters</i> , 2011 , 98, 104101	3.4	8
31	Electronic property and bonding configuration at the TiN(111)/VN(111) interface. <i>Journal of Applied Physics</i> , 2010 , 108, 033714	2.5	48
30	Atomic-scale structure and electronic property of the LaAlO ₃ /TiO ₂ interface. <i>Journal of Applied Physics</i> , 2010 , 108, 113701	2.5	45
29	Dimensionality-driven insulator-metal transition in A-site excess non-stoichiometric perovskites. <i>Nature Communications</i> , 2010 , 1, 106	17.4	63
28	Effect of Cold Forging and Static Recrystallization on Microstructure and Mechanical Property of Magnesium Alloy AZ31. <i>Materials Transactions</i> , 2010 , 51, 341-346	1.3	12
27	Oxygen Adsorption on Anatase TiO ₂ (101) and (001) Surfaces from First Principles. <i>Materials Transactions</i> , 2010 , 51, 171-175	1.3	70
26	Microstructure and Gas-Sensing Property of Titania-Added ZnSnO ₃ . <i>Materials Transactions</i> , 2010 , 51, 1326-1329	1.3	4
25	Microstructure Evolution of Dual-Directional-Extruded Mg Alloy AZ31: An Experimental and Simulation Study. <i>Materials Transactions</i> , 2010 , 51, 2088-2093	1.3	3
24	UV Light Activation of TiO ₂ -Doped SnO ₂ Thick Film for Sensing Ethanol at Room Temperature. <i>Materials Transactions</i> , 2010 , 51, 243-245	1.3	32
23	Epitaxial multi-component rare-earth oxide: A high-k material with ultralow mismatch to Si. <i>Materials Letters</i> , 2010 , 64, 866-868	3.3	7
22	Atomic motion in Mg ₃ Al ₂ Zn during twinning deformation. <i>Scripta Materialia</i> , 2010 , 62, 556-559	5.6	27
21	Microstructure and mechanical property of dual-directional-extruded Mg alloy AZ31. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 4050-4055	5.3	8
20	Sensitivity improvement of TiO ₂ -doped SnO ₂ to volatile organic compounds. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010 , 43, 633-638	3	87
19	Molecular mechanics simulation of the sliding behavior between nested walls in a multi-walled carbon nanotube. <i>Carbon</i> , 2010 , 48, 2934-2940	10.4	58

18	Ohmic contacts on silicon carbide: The first monolayer and its electronic effect. <i>Physical Review B</i> , 2009 , 80,	3.3	54
17	Individual charge-trapping dislocations in an ionic insulator. <i>Applied Physics Letters</i> , 2009 , 95, 184101	3.4	5
16	Atomic and electronic structure of the YBa ₂ Cu ₃ O ₇ /SrTiO ₃ interface from first principles. <i>Journal of Applied Physics</i> , 2009 , 106, 093714	2.5	11
15	Selective Detection of Formaldehyde Gas Using a Cd-Doped TiO ₂ -SnO ₂ Sensor. <i>Sensors</i> , 2009 , 9, 9029-38	3.38	121
14	Interface atomic-scale structure and its impact on quantum electron transport. <i>Advanced Materials</i> , 2009 , 21, 4966-4969	2.4	20
13	First-principles simulations on bulk Ta ₂ O ₅ and Cu/Ta ₂ O ₅ /Pt heterojunction: Electronic structures and transport properties. <i>Journal of Applied Physics</i> , 2009 , 106, 103713	2.5	48
12	SiC/Ti ₃ SiC ₂ interface: Atomic structure, energetics, and bonding. <i>Physical Review B</i> , 2009 , 79,	3.3	49
11	Quantum electron transport through SrTiO ₃ : Effects of dopants on conductance channel. <i>Applied Physics Letters</i> , 2009 , 94, 252103	3.4	6
10	Change-Channel Angular Extrusion of Magnesium Alloy AZ31. <i>Materials Transactions</i> , 2009 , 50, 765-770	1.3	10
9	Growth and Microstructure of Epitaxial Ti ₃ SiC ₂ Contact Layers on SiC. <i>Materials Transactions</i> , 2009 , 50, 1071-1075	1.3	27
8	First Principles Calculations on Electron Conduction Paths in Solid Electrolytes: Toward an Understanding of the Working Mechanism of Atomic Switches. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2009 , 73, 577-582	0.4	
7	Crystalline Nanoscale M ₂ O ₃ (M=Gd, Nd) Thin Films Grown by Molecular Beam Epitaxy on Si(111). <i>Materials Transactions</i> , 2009 , 50, 2115-2117	1.3	2
6	Migration of Ag in low-temperature Ag ₂ S from first principles. <i>Journal of Chemical Physics</i> , 2008 , 128, 014704	3.9	20
5	Excess-silver-induced bridge formation in a silver sulfide atomic switch. <i>Applied Physics Letters</i> , 2008 , 93, 152106	3.4	43
4	Nonequilibrium quantum transport properties of a silver atomic switch. <i>Nano Letters</i> , 2007 , 7, 2688-92	11.5	49
3	Boosting acidic water oxidation performance by constructing arrays-like nanoporous Ir _x Ru _{1-x} O ₂ with abundant atomic steps. <i>Nano Research</i> , 1	10	3
2	Ultrafast growth of high-quality large-sized GaSe crystals by liquid metal promoter. <i>Nano Research</i> , 1	10	1
1	Recent Development and Future Perspectives of Amorphous Transition Metal-Based Electrocatalysts for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2200827	21.8	8

