

Xing-Zhong Cao

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.

353
papers

9,929
citations

50
h-index

87
g-index

372
ext. papers

12,612
ext. citations

6.2
avg. IF

6.48
L-index

#	Paper	IF	Citations
353	The point defect and electronic structure of K doped LaCo _{0.9} Fe _{0.1} O ₃ perovskite with enhanced microwave absorbing ability. <i>Nano Research</i> , 2022 , 15, 3720	10	24
352	Exploration of vacancy defect formation and evolution in low-energy ion implanted pure titanium. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 8467-8467	6.7	1
351	High-flux and solvent-selective membranes with aromatic functionalities and dual-layer structures. <i>Journal of Applied Polymer Science</i> , 2022 , 139, 51418	2.9	
350	Vapor-liquid interfacial polymerization of covalent organic framework membranes for efficient alcohol dehydration. <i>Journal of Membrane Science</i> , 2022 , 641, 119905	9.6	3
349	Polyvinyl pyrrolidone-coordinated ultrathin bismuth oxybromide nanosheets for boosting photoreduction of carbon dioxide via ligand-to-metal charge transfer. <i>Journal of Colloid and Interface Science</i> , 2022 , 606, 1087-1100	9.3	1
348	Metal-organic framework enables ultraselective polyamide membrane for desalination and water reuse.. <i>Science Advances</i> , 2022 , 8, eabm4149	14.3	8
347	Exploration on the Effect of Pretreatment Conditions on Hydrogen-Induced Defects in Pure Titanium by Positron Annihilation Spectroscopy. <i>Metals</i> , 2022 , 12, 595	2.3	
346	Micro-defects evolution of (Al _{0.33} Cr _{0.21} Fe _{0.28} Zr _{0.18})O ₂ and (Al _{0.33} Cr _{0.2} Mn _{0.09} Fe _{0.22} Zr _{0.16})O ₂ induced by hydrogen ions irradiation. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 13762-13770	6.7	0
345	Improving the exploration of vacancy evolution in P92 alloy under Fe ion irradiation using positron annihilation. <i>Journal of Nuclear Materials</i> , 2022 , 153714	3.3	0
344	High performance membranes containing rigid contortion units prepared by interfacial polymerization for CO ₂ separation. <i>Journal of Membrane Science</i> , 2022 , 652, 120459	9.6	0
343	Irradiation engineered lattice distortion in Ti-Ni shape memory alloy achieving enhanced elastocaloric effect. <i>Journal of Alloys and Compounds</i> , 2022 , 906, 164280	5.7	1
342	Thermal evolution of microdefects in He ion irradiated W-Ni-Fe heavy alloy. <i>Journal of Nuclear Materials</i> , 2022 , 153773	3.3	0
341	Porous chitosan-derived activated N-doped carbon-supported Pd nanoparticles engaged in Al, Fe pillared montmorillonite as novel heterogeneous catalysts. <i>Applied Clay Science</i> , 2022 , 224, 106520	5.2	1
340	The Enhanced Swelling Resistance of W/Cu Nanocomposites by Vacancy-Type Defects Self-Recovery. <i>Crystals</i> , 2022 , 12, 759	2.3	0
339	Enhanced polyphosphazene membranes for CO ₂ /CH ₄ separation via molecular design. <i>Journal of Membrane Science</i> , 2022 , 656, 120661	9.6	1
338	Effects of Nonhydroxyl Oxygen Heteroatoms in Diethylene Glycols on the Properties of 2,5-Furandicarboxylic Acid-Based Polyesters. <i>Biomacromolecules</i> , 2021 , 22, 4823-4832	6.9	3
337	Study on thermal shock irradiation resistance of CoCrFeMnNi high entropy alloy by high intensity pulsed ion beam. <i>Journal of Nuclear Materials</i> , 2021 , 559, 153413	3.3	0

336	Facile construction of polyzwitterion membrane via assembly of graphene oxide-based core-brush nanosheet for high-efficiency water permeation. <i>Journal of Membrane Science</i> , 2021 , 120150	9.6	1
335	Defect evolution in tungsten exposed to helium plasma and deuterium plasmas studied by slow positron beam. <i>Nuclear Materials and Energy</i> , 2021 , 29, 101094	2.1	0
334	Thermal kinetics of micro-defects in He-ion implanted W and W5Re alloys. <i>Tungsten</i> , 2021 , 3, 89-100	4.6	1
333	Investigation of the interaction between hydrogen and irradiation defects in titanium by using positron annihilation spectroscopy. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 13162-13170	6.7	6
332	Amorphous Domains in Black Titanium Dioxide. <i>Advanced Materials</i> , 2021 , 33, e2100407	24	14
331	Investigation of spatial relationship between helium bubbles and dislocation loops in RAFM steel. <i>Journal of Nuclear Materials</i> , 2021 , 548, 152862	3.3	12
330	Depth distributions of cavities in advanced ferritic/martensitic and austenitic steels with high helium preimplantation and high damage level. <i>Materials Today Energy</i> , 2021 , 20, 100687	7	9
329	Oxygen vacancy-rich hierarchical BiOBr hollow microspheres with dramatic CO photoreduction activity. <i>Journal of Colloid and Interface Science</i> , 2021 , 593, 231-243	9.3	35
328	Structural rejuvenation in a Zr-based bulk metallic glass via electropulsing treatment. <i>Applied Physics Letters</i> , 2021 , 119, 043901	3.4	1
327	Self-assembled iron-containing mordenite monolith for carbon dioxide sieving. <i>Science</i> , 2021 , 373, 315-320	39.3	45
326	MXene versus graphene oxide: Investigation on the effects of 2D nanosheets in mixed matrix membranes for CO ₂ separation. <i>Journal of Membrane Science</i> , 2021 , 620, 118850	9.6	26
325	Mixed matrix membranes for CO ₂ separations by incorporating microporous polymer framework fillers with amine-rich nanochannels. <i>Journal of Membrane Science</i> , 2021 , 620, 118923	9.6	21
324	Graphene quantum dots (GQDs)-assembled membranes with intrinsic functionalized nanochannels for high-performance nanofiltration. <i>Chemical Engineering Journal</i> , 2021 , 420, 127602	14.7	18
323	Postirradiation Annealing and Reirradiation Study of High-Dose Proton-Irradiated FeCu Model Alloys by Positron Annihilation and Nanoindentation. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2000458	1.3	
322	Origination and evolution of point defects in AlN film annealed at high temperature. <i>Journal of Luminescence</i> , 2021 , 235, 118032	3.8	7
321	Vacancy engineered polymeric carbon nitride nanosheets for enhanced photoredox catalytic efficiency. <i>Cell Reports Physical Science</i> , 2021 , 100491	6.1	4
320	Investigation on structural and optical properties of ZnSe thin films prepared by selenization. <i>Superlattices and Microstructures</i> , 2021 , 156, 106965	2.8	2
319	Implantation profiles of muon and secondary positron simulated by Geant4. <i>Physica Scripta</i> , 2021 , 96, 125305	2.6	0

318	Boosting the Catalytic Performance of CeO in Toluene Combustion via the Ce-Ce Homogeneous Interface. <i>Environmental Science & Technology</i> , 2021 , 55, 12630-12639	10.3	13
317	The influence of rhenium addition on the distribution of vacancy-type defects in tungsten. <i>Journal of Nuclear Materials</i> , 2021 , 553, 153045	3.3	3
316	Effects of dislocations and hydrogen concentration on hydrogen embrittlement of austenitic 316 stainless steels. <i>Journal of Alloys and Compounds</i> , 2021 , 876, 160134	5.7	3
315	Enhanced photocatalytic activity of BiOF _x Br _{1-x} with H ₂ O ₂ on degradation of p-nitrophenol. <i>Optik</i> , 2021 , 241, 166843	2.5	0
314	Enhanced desulfurization performance of polyethylene glycol membrane by incorporating metal organic framework MOF-505. <i>Separation and Purification Technology</i> , 2021 , 272, 118924	8.3	5
313	Development of ultrathin polyamide nanofilm with enhanced inner-pore interconnectivity via graphene quantum dots-assembly intercalation for high-performance organic solvent nanofiltration. <i>Journal of Membrane Science</i> , 2021 , 635, 119498	9.6	7
312	The investigation of distribution on size and concentration of helium bubbles in Y-bearing ODS steel using by SAXS and GIXRD. <i>Journal of Nuclear Materials</i> , 2021 , 554, 153083	3.3	0
311	Defects introduced by helium irradiation at different temperatures in W and W-5wt%Re alloy. <i>Fusion Engineering and Design</i> , 2021 , 172, 112746	1.7	1
310	Effect of electrochemical hydrogen charging on defect structure in titanium. <i>Journal of Alloys and Compounds</i> , 2021 , 885, 160909	5.7	2
309	First-principles study of helium in austenitic Fe 6.3 at% Cr alloys: Structural, stability, energetics, and clustering with vacancies. <i>Materials Today Communications</i> , 2021 , 29, 102837	2.5	1
308	Comparison of oxygen vacancy and interstitial oxygen in KDP and ADP crystals from density functional theory calculations. <i>Computational Materials Science</i> , 2020 , 182, 109783	3.2	3
307	Surface passivation enabled-structural engineering of I-III-VI ₂ nanocrystal photocatalysts. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9951-9962	13	7
306	Photocatalytic reduction of CO ₂ on BiOX: Effect of halogen element type and surface oxygen vacancy mediated mechanism. <i>Applied Catalysis B: Environmental</i> , 2020 , 274, 119063	21.8	112
305	Enhanced photocatalytic destruction of pollutants by surface W vacancies in V-BiWO under visible light. <i>Journal of Colloid and Interface Science</i> , 2020 , 576, 385-393	9.3	12
304	Contribution of cryogenic thermal cycling to the atomic dynamics in a La-based bulk metallic glass with different initial states. <i>Journal of Applied Physics</i> , 2020 , 127, 205104	2.5	2
303	Stability and energetics of HenVm complexes in FeCr alloys: Ab initio study. <i>Materials Chemistry and Physics</i> , 2020 , 253, 123314	4.4	2
302	Rapid proton exchange between surface bridging hydroxyls and adsorbed molecules on TiO ₂ . <i>Applied Catalysis B: Environmental</i> , 2020 , 277, 119234	21.8	10
301	Effect of Transition Metal Ion Doping on the Microstructure, Defect Evolution, and Magnetic and Magnetocaloric Properties of CuFeO ₂ Ceramics. <i>Journal of Superconductivity and Novel Magnetism</i> , 2020 , 33, 2881-2890	1.5	4

300	600 nm-driven photoreduction of CO ₂ through the topological transformation of layered double hydroxides nanosheets. <i>Applied Catalysis B: Environmental</i> , 2020 , 270, 118884	21.8	23
299	Selenium vacancy-rich and carbon-free VSe nanosheets for high-performance lithium storage. <i>Nanoscale</i> , 2020 , 12, 8858-8866	7.7	8
298	Evolution of vacancy defects in heavy ion irradiated tungsten exposed to helium plasma. <i>Journal of Nuclear Materials</i> , 2020 , 532, 152051	3.3	8
297	Migration behaviour of vacancies and damage structure recovery in a Fe-based Fe-Cr-Mn-Cu-Mo multi-component alloy. <i>Philosophical Magazine</i> , 2020 , 100, 1733-1748	1.6	3
296	Lattice defects and micro-strains in V60Ti25Cr3Fe12 alloy and influence on the ab/desorption of hydrogen. <i>Journal of Alloys and Compounds</i> , 2020 , 830, 154675	5.7	6
295	Ultrathin polyamide nanofilm with an asymmetrical structure: A novel strategy to boost the permeance of reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2020 , 612, 118402	9.6	5
294	Mg-vacancy-induced Ni-vacancy clusters: highly efficient hydrogen production from cellulose. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 14697-14705	13	9
293	Exploration of the Synergy Between 2D Nanosheets and a Non-2D Filler in Mixed Matrix Membranes for Gas Separation. <i>Frontiers in Chemistry</i> , 2020 , 8, 58	5	9
292	Evolution of defects with isochronal annealing in helium-irradiated 316L studied by slow positron beam. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020 , 467, 80-85	1.2	4
291	Insight into structural stability and helium diffusion behavior of Fe-Cr alloys from first-principles.. <i>RSC Advances</i> , 2020 , 10, 3277-3292	3.7	8
290	Efficient electrochemical reduction of carbon dioxide into ethylene boosted by copper vacancies on stepped cuprous oxide. <i>Journal of CO₂ Utilization</i> , 2020 , 38, 125-131	7.6	9
289	A MOF Glass Membrane for Gas Separation. <i>Angewandte Chemie</i> , 2020 , 132, 4395-4399	3.6	22
288	Adsorption and oxidation of SO on the surface of TiO nanoparticles: the role of terminal hydroxyl and oxygen vacancy-Ti states. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 9943-9953	3.6	7
287	Chitosan modified Ti-PILC supported PdO catalysts for coupling reactions of aryl halides with terminal alkynes. <i>International Journal of Biological Macromolecules</i> , 2020 , 158, 67-74	7.9	2
286	Sensitivity of positrons at hydrogen storage sites in FeCr alloy containing vacancy and helium atom. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 15571-15577	6.7	10
285	Effect of tissue density on PET spatial resolution in magnetic environment. <i>European Physical Journal Plus</i> , 2020 , 135, 1	3.1	
284	Positron Annihilation Spectroscopy Characterization of Formation of Helium/Hydrogen-Vacancy Nano-Clusters in FeCr Alloy. <i>Acta Physica Polonica A</i> , 2020 , 137, 235-237	0.6	2
283	Effect of Detector Material and Size on Pile-Up Elimination in Positron Burst Measurement. <i>Acta Physica Polonica A</i> , 2020 , 137, 152-155	0.6	

282	Research progress of hydrogen/helium effects in metal materials by positron annihilation spectroscopy. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020 , 69, 177801	0.6	2
281	Study on the irradiation damage in Fe-based metallic glasses induced by Ne ¹⁰⁺ ions. <i>Fusion Engineering and Design</i> , 2020 , 157, 111635	1.7	2
280	The relationship between the doping concentration and d ₀ ferromagnetism in n-type 4H-SiC. <i>Journal of Applied Physics</i> , 2020 , 128, 193901	2.5	1
279	Blister-dominated retention mechanism in tungsten exposed to high-fluence deuterium plasma. <i>Nuclear Fusion</i> , 2020 , 60, 126034	3.3	4
278	Studies on the microstructure and magnetic properties of Cu _{0.97} A _{0.03} FeO ₂ (A = Ca, Sr, Ba) ceramics. <i>Journal of Magnetism and Magnetic Materials</i> , 2020 , 498, 166082	2.8	4
277	Synergetic effects of defects and acid sites of 2D-ZnO photocatalysts on the photocatalytic performance. <i>Journal of Hazardous Materials</i> , 2020 , 385, 121527	12.8	17
276	Enhanced desulfurization performance of hybrid membranes using embedded hierarchical porous SBA-15. <i>Frontiers of Chemical Science and Engineering</i> , 2020 , 14, 661-672	4.5	3
275	1-methylimidazole as a novel additive for reverse osmosis membrane with high flux-rejection combinations and good stability. <i>Journal of Membrane Science</i> , 2020 , 599, 117830	9.6	17
274	Bis(phenyl)fluorene-based polymer of intrinsic microporosity/functionalized multi-walled carbon nanotubes mixed matrix membranes for enhanced CO ₂ separation performance. <i>Reactive and Functional Polymers</i> , 2020 , 147, 104465	4.6	13
273	A MOF Glass Membrane for Gas Separation. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 4365-4369	4.1	125
272	Porous Bi ₂ O ₃ with multiple vacancy associates on highly exposed active {220} facets for enhanced photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2020 , 265, 118563	21.8	29
271	Electron-Doping Mottronics in Strongly Correlated Perovskite. <i>Advanced Materials</i> , 2020 , 32, e1905060	24	14
270	Preparation and properties of anion exchange membranes with exceptional alkaline stable polymer backbone and cation groups. <i>Journal of Membrane Science</i> , 2020 , 596, 117720	9.6	38
269	Mediation of high temperature radiation damage in bcc iron by Au or Cu precipitation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020 , 463, 69-75	1.2	3
268	High boron removal polyamide reverse osmosis membranes by swelling induced embedding of a sulfonyl molecular plug. <i>Journal of Membrane Science</i> , 2020 , 597, 117716	9.6	24
267	Two-dimensional covalent organic frameworks (COF-LZU1) based mixed matrix membranes for pervaporation. <i>Separation and Purification Technology</i> , 2020 , 241, 116406	8.3	11
266	Mechanistic Insights of the Critical Role of Hydrogen Donor in Controlling Drug Release From Acrylate Adhesive. <i>Journal of Pharmaceutical Sciences</i> , 2020 , 109, 1096-1104	3.9	1
265	Characterization of oxide film in P92 ferritic-martensitic steel exposed to high temperature and pressure water. <i>Journal of Nuclear Materials</i> , 2020 , 541, 152406	3.3	4

264	Achieving the Stable Structure and Superior Performance of Na ₃ V ₂ (PO ₄) ₂ O ₂ F Cathodes via Na-Site Regulation. <i>ACS Applied Energy Materials</i> , 2020 , 3, 7649-7658	6.1	9
263	Surface Engineering to Reduce the Interfacial Resistance for Enhanced Photocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2020 , 10, 8742-8750	13.1	15
262	Defect characteristics, local electron density, and magnetic properties of rare Earth-doped CuFeO ₂ ceramics. <i>Ceramics International</i> , 2020 , 46, 28400-28406	5.1	3
261	Study on the effect of crosslinking temperature on microporous polyamide membrane structure and its nitrogen/cyclohexane separation performance. <i>Separation and Purification Technology</i> , 2020 , 252, 117401	8.3	3
260	Effect of film thickness on structural and optical properties of ZnS:Cu films prepared by vulcanization. <i>Superlattices and Microstructures</i> , 2020 , 146, 106671	2.8	2
259	Alkali Etching of Layered Double Hydroxide Nanosheets for Enhanced Photocatalytic N ₂ Reduction to NH ₃ . <i>Advanced Energy Materials</i> , 2020 , 10, 2002199	21.8	78
258	Influence of radiation defects on deuterium permeation behavior in tungsten. <i>Journal of Nuclear Materials</i> , 2020 , 542, 152455	3.3	2
257	Molecular dynamics simulations of helium migration, diffusion behavior of helium bubbles, and melting point of single crystal in bulk Fe. <i>Indian Journal of Physics</i> , 2020 , 1	1.4	
256	Inhibitory effect of dislocation on helium irradiation induced damage in Fe-9 wt.Cr alloy. <i>Fusion Engineering and Design</i> , 2020 , 161, 111978	1.7	
255	Ultrathin heterostructured covalent organic framework membranes with interfacial molecular sieving capacity for fast water-selective permeation. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 19328-19336	13	18
254	Roles of Oxygen Vacancies in the Bulk and Surface of CeO for Toluene Catalytic Combustion. <i>Environmental Science & Technology</i> , 2020 , 54, 12684-12692	10.3	62
253	Corrosion protection and thermal and mechanical properties for epoxy/thiol/imidazole systems of improved performance. <i>High Performance Polymers</i> , 2020 , 32, 242-257	1.6	1
252	Combining tannic acid-modified support and a green co-solvent for high performance reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2020 , 595, 117474	9.6	21
251	Polyetheramide organic solvent nanofiltration membrane prepared via an interfacial assembly and polymerization procedure. <i>Separation and Purification Technology</i> , 2020 , 234, 116033	8.3	12
250	Accurately controlling the hierarchical nanostructure of polyamide membranes via electrostatic atomization-assisted interfacial polymerization. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9160-9167	13	15
249	Investigation on the activation mechanism of hydrogen absorption in TiZrNbTa high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2019 , 781, 613-620	5.7	40
248	Impact of Li doping on the microstructure, defects, and physical properties of CuFeO ₂ multiferroic ceramics. <i>Ceramics International</i> , 2019 , 45, 24570-24577	5.1	7
247	Oxygen-Cluster-Modified Anatase with Graphene Leads to Efficient and Recyclable Photo-Catalytic Conversion of CO to CH Supported by the Positron Annihilation Study. <i>Scientific Reports</i> , 2019 , 9, 13103	4.9	11

246	Influence of nanochannel structure on helium-vacancy cluster evolution and helium retention. <i>Journal of Nuclear Materials</i> , 2019 , 527, 151822	3.3	11
245	Band gap engineering of BiOI via oxygen vacancies induced by graphene for improved photocatalysis. <i>New Journal of Chemistry</i> , 2019 , 43, 1523-1530	3.6	19
244	Interface engineering of mixed matrix membrane via CO ₂ -philic polymer brush functionalized graphene oxide nanosheets for efficient gas separation. <i>Journal of Membrane Science</i> , 2019 , 586, 23-33	9.6	25
243	SIFSIX-3-Zn/PIM-1 mixed matrix membranes with enhanced permeability for propylene/propane separation. <i>Journal of Membrane Science</i> , 2019 , 588, 117201	9.6	25
242	Highly Selective Photoreduction of CO ₂ with Suppressing H ₂ Evolution over Monolayer Layered Double Hydroxide under Irradiation above 600 nm. <i>Angewandte Chemie</i> , 2019 , 131, 11986-11993	3.6	30
241	Highly Selective Photoreduction of CO with Suppressing H ₂ Evolution over Monolayer Layered Double Hydroxide under Irradiation above 600 nm. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 11860-11867	16.4	109
240	High-temperature dielectrics based on (1-y)[(1-x)Bi _{0.5} Na _{0.5} TiO ₃ -xBiAlO ₃]-yCaZrO ₃ ternary system with stable permittivity and low dielectric loss in a wide temperature range. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 4160-4167	6	27
239	Tunable PMA and Interfacial Microstructure Induced by a Hf(HfO ₂) Interfacial Spacer in MTJs with Two MgO Layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1900089	1.6	1
238	Investigation of organophilic montmorillonites supported palladium catalytic composites by combined positron annihilation lifetime spectroscopy and X-ray diffraction. <i>Radiation Physics and Chemistry</i> , 2019 , 165, 108343	2.5	2
237	Investigation of the surface microstructure evolution of silicone rubber during corona discharge via slow positron beam and electrochemical impedance spectroscopy. <i>Plasma Processes and Polymers</i> , 2019 , 16, 1900057	3.4	3
236	Concurrent Improvement of Photocarrier Separation and Extraction in ZnO Nanocrystal Ultraviolet Photodetectors. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 14766-14773	3.8	15
235	Generating Defect-Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 9464-9469	16.4	178
234	Beyond 1T-phase? Synergistic Electronic Structure and Defects Engineering in 2H-MoS ₂ xSe ₂ (1-x) Nanosheets for Enhanced Hydrogen Evolution Reaction and Sodium Storage. <i>ChemCatChem</i> , 2019 , 11, 3200-3211	5.2	12
233	Defect-Tailoring Mediated Electron-Hole Separation in Single-Unit-Cell Bi O Br Nanosheets for Boosting Photocatalytic Hydrogen Evolution and Nitrogen Fixation. <i>Advanced Materials</i> , 2019 , 31, e1807576	7.4	188
232	Generating Defect-Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. <i>Angewandte Chemie</i> , 2019 , 131, 9564-9569	3.6	30
231	The effect of interfacial oxygen migration on the PMA and thermal stability in MTJ with double MgO layers. <i>Applied Surface Science</i> , 2019 , 488, 30-35	6.7	10
230	Effects of the Electrons in fused polycyclic aromatic hydrocarbons on positron annihilation. <i>Radiation Physics and Chemistry</i> , 2019 , 163, 39-44	2.5	
229	Study on vacancy-type defects in SIMP steel induced by separate and sequential H and He ion implantation. <i>Journal of Nuclear Materials</i> , 2019 , 520, 131-139	3.3	9

228	Nanoparticle-Assembled Thin Film with Amphipathic Nanopores for Organic Solvent Nanofiltration. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 17804-17813	9.5	32
227	A loosely stacked lamellar membrane of irregular MoS ₂ flakes for ultrahigh water and organics permeation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12698-12705	13	20
226	Interfacial Property Modulation of PIM-1 through Polydopamine-Derived Submicrospheres for Enhanced CO ₂ /N ₂ Separation Performance. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 19613-19622	9.5	20
225	Reduced blister quantity in damaged tungsten exposed to deuterium plasma. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019 , 62, 1	3.6	1
224	Hydrogen isotope permeation and retention behavior in the CoCrFeMnNi high-entropy alloy. <i>Journal of Nuclear Materials</i> , 2019 , 522, 41-44	3.3	4
223	Influence of intrinsic or extrinsic doping on lattice locations of carbon in semi-insulating GaN. <i>Applied Physics Express</i> , 2019 , 12, 061002	2.4	5
222	Study of the effects of source type and magnetic field on the spatial distribution of positron annihilation events in PET/MRI applications. <i>European Physical Journal Plus</i> , 2019 , 134, 1	3.1	0
221	Point-Defect Distribution and Transformation Near the Surfaces of AlGa _N Films Grown by MOCVD. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8865-8870	3.8	8
220	Influence of low-temperature sulfidation on the structure of ZnS thin films. <i>Chinese Physics B</i> , 2019 , 28, 024214	1.2	
219	Effect of Y ₂ O ₃ particles on the helium ion irradiation damage of W-2%Y ₂ O ₃ composite prepared by wet chemical method. <i>Materialia</i> , 2019 , 6, 100268	3.2	12
218	Design of a high-sampling-rate electronic module for array-detector positron annihilation lifetime measurements. <i>Radiation Detection Technology and Methods</i> , 2019 , 3, 1	0.7	2
217	Investigations of Ti-substituted CuFeO ₂ ceramics on the structure, defects, the local electron density and magnetic properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2019 , 484, 279-285	2.8	8
216	Atomically-thin Bi ₂ MoO ₆ nanosheets with vacancy pairs for improved photocatalytic CO ₂ reduction. <i>Nano Energy</i> , 2019 , 61, 54-59	17.1	150
215	Towards understanding the evolution of dislocation loops and their interaction with vacancies in Fe ₉ Cr alloy during the irradiation swelling incubation period. <i>Materialia</i> , 2019 , 5, 100241	3.2	7
214	Proton irradiation induced defects in T92 steels: An investigation by TEM and positron annihilation spectroscopy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019 , 442, 59-66	1.2	4
213	Support morphology-dependent alloying behaviour and interfacial effects of bimetallic Ni-Cu/CeO ₂ catalysts. <i>Chemical Science</i> , 2019 , 10, 3556-3566	9.4	21
212	Hybrid membranes with Cu(II) loaded metal organic frameworks for enhanced desulfurization performance. <i>Separation and Purification Technology</i> , 2019 , 210, 258-267	8.3	21
211	Elevated Pervaporative Desulfurization Performance of Pebax-Ag ⁺ @MOFs Hybrid Membranes by Integrating Multiple Transport Mechanisms. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 16911-16921	3.9	7

210	Migration of carbon from Ga sites to N sites in GaN: a combined PAS and hybrid DFT study. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, 090901	1.4	3
209	Effect of interaction between H and He on micro-defects in Fe9Cr alloy investigated by slow positron beam. <i>Journal of Nuclear Materials</i> , 2019 , 526, 151748	3.3	10
208	The effect of oxygen vacancies in ZnO at an Au/ZnO interface on its catalytic selective oxidation of glycerol. <i>Journal of Catalysis</i> , 2019 , 377, 271-282	7.3	32
207	Synergistic effect of internal electric field and oxygen vacancy on the photocatalytic activity of BiOBr with isomorphous fluorine substitution. <i>Journal of Colloid and Interface Science</i> , 2019 , 554, 500-513	8.3	23
206	Evolution of microstructures and hardening property of initial irradiated, post-irradiation annealed and re-irradiated Chinese-type low-Cu reactor pressure vessel steel. <i>Journal of Nuclear Materials</i> , 2019 , 523, 333-341	3.3	9
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202	Depth synergistic effect of irradiation damage on tungsten irradiated by He-ions with various energies. <i>Journal of Nuclear Materials</i> , 2019 , 517, 192-200	3.3	4
201	Hollow monocrystalline silicalite-1 hybrid membranes for efficient pervaporative desulfurization. <i>AIChE Journal</i> , 2019 , 65, 196-206	3.6	7
200	Implantation profiles and depth distribution of slow positron beam simulated by Geant4 toolkit. <i>Physica Scripta</i> , 2019 , 94, 045301	2.6	4
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196	Layer-by-layer self-assembled nanocomposite membranes via bio-inspired mineralization for pervaporation dehydration. <i>Journal of Membrane Science</i> , 2019 , 570-571, 44-52	9.6	14
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