Xing-Zhong Cao

List of Publications by Year
in descending order

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368 papers	15,057 citations	20759 60 h-index	25716 108 g-index
372 all docs	372 docs citations	372 times ranked	15539 citing authors

#	Article	IF	Citations
1	Highâ€flux and solventâ€selective membranes with aromatic functionalities and dualâ€layer structures. Journal of Applied Polymer Science, 2022, 139, 51418.	1.3	1
2	Vapor-liquid interfacial polymerization of covalent organic framework membranes for efficient alcohol dehydration. Journal of Membrane Science, 2022, 641, 119905.	4.1	18
3	Polyvinyl pyrrolidone-coordinated ultrathin bismuth oxybromide nanosheets for boosting photoreduction of carbon dioxide via ligand-to-metal charge transfer. Journal of Colloid and Interface Science, 2022, 606, 1087-1100.	5.0	23
4	Study on thermal shock irradiation resistance of CoCrFeMnNi high entropy alloy by high intensity pulsed ion beam. Journal of Nuclear Materials, 2022, 559, 153413.	1.3	7
5	The point defect and electronic structure of K doped LaCo0.9Fe0.1O3 perovskite with enhanced microwave absorbing ability. Nano Research, 2022, 15, 3720-3728.	5.8	129
6	Facile construction of polyzwitterion membrane via assembly of graphene oxide-based core-brush nanosheet for high-efficiency water permeation. Journal of Membrane Science, 2022, 644, 120150.	4.1	10
7	Exploration of vacancy defect formation and evolution in low-energy ion implanted pure titanium. International Journal of Hydrogen Energy, 2022, 47, 8467-8479.	3.8	7
8	Robust In Situ Fouling Control toward Thin-Film Composite Reverse Osmosis Membrane via One-Step Deposition of a Ternary Homogeneous Metalâ€"Organic Hybrid Layer. ACS Applied Materials & Interfaces, 2022, 14, 7208-7220.	4.0	3
9	Metal-organic framework enables ultraselective polyamide membrane for desalination and water reuse. Science Advances, 2022, 8, eabm4149.	4.7	87
10	Investigation of the Oxidation Behavior of Cr20Mn17Fe18Ta23W22 and Microdefects Evolution Induced by Hydrogen Ions before and after Oxidation. Materials, 2022, 15, 1895.	1.3	1
11	Exploration on the Effect of Pretreatment Conditions on Hydrogen-Induced Defects in Pure Titanium by Positron Annihilation Spectroscopy. Metals, 2022, 12, 595.	1.0	0
12	Micro-defects evolution of (Al0.33Cr0.21Fe0.28Zr0.18)O2 and (Al0.33Cr0.2Mn0.09Fe0.22Zr0.16)O2 induced by hydrogen ions irradiation. International Journal of Hydrogen Energy, 2022, 47, 13762-13770.	3.8	3
13	Improving the exploration of vacancy evolution in P92 alloy under Fe ion irradiation using positron annihilation. Journal of Nuclear Materials, 2022, , 153714.	1.3	1
14	High performance membranes containing rigid contortion units prepared by interfacial polymerization for CO2 separation. Journal of Membrane Science, 2022, 652, 120459.	4.1	11
15	Irradiation engineered lattice distortion in Ti-Ni shape memory alloy achieving enhanced elastocaloric effect. Journal of Alloys and Compounds, 2022, 906, 164280.	2.8	9
16	Thermal evolution of microdefects in He ion irradiated W-Ni-Fe heavy alloy. Journal of Nuclear Materials, 2022, , 153773.	1.3	4
17	Effects of hydrogen charging and deformation on tensile properties of a multi-component alloy for nuclear applications. Tungsten, 2022, 4, 212-218.	2.0	7
18	Porous chitosan-derived activated N-doped carbon-supported Pd nanoparticles encaged in Al, Fe pillared montmorillonite as novel heterogeneous catalysts. Applied Clay Science, 2022, 224, 106520.	2.6	8

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19	The Enhanced Swelling Resistance of W/Cu Nanocomposites by Vacancy-Type Defects Self-Recovery. Crystals, 2022, 12, 759.	1.0	1
20	Enhanced polyphosphazene membranes for CO2/CH4 separation via molecular design. Journal of Membrane Science, 2022, 656, 120661.	4.1	5
21	Irradiation resistance of preceramic paperâ€derived SiCf/SiC laminated composites. Journal of Materials Science, 2022, 57, 10153-10166.	1.7	4
22	Spherical nanoindentation stressâ€“strain responses of SIMP steel to synergistic effects of irradiation by H and He ions. Nuclear Science and Techniques/Hewuli, 2022, 33, .	1.3	2
23	Deuterium retention and desorption behavior of W-Ta-Cr-V high entropy alloy. Journal of Nuclear Materials, 2022, 568, 153897.	1.3	10
24	Electron-Deficient Pd clusters induced by spontaneous reduction of support defect for selective phenol hydrogenation. Chemical Engineering Science, 2022, 260, 117867.	1.9	2
25	Positron annihilation study of chitosan and its derived carbon/pillared montmorillonite clay stabilized Pd species nanocomposites. Polymer Testing, 2022, 114, 107689.	2.3	4
26	Molecular dynamics simulations of helium migration, diffusion behavior of helium bubbles, and melting point of single crystal in bulk Î³-Fe. Indian Journal of Physics, 2021, 95, 2375-2385.	0.9	0
27	MXene versus graphene oxide: Investigation on the effects of 2D nanosheets in mixed matrix membranes for CO2 separation. Journal of Membrane Science, 2021, 620, 118850.	4.1	65
28	Mixed matrix membranes for CO2 separations by incorporating microporous polymer framework fillers with amine-rich nanochannels. Journal of Membrane Science, 2021, 620, 118923.	4.1	53
29	Graphene quantum dots (GQDs)-assembled membranes with intrinsic functionalized nanochannels for high-performance nanofiltration. Chemical Engineering Journal, 2021, 420, 127602.	6.6	51
30	Postirradiation Annealing and Reirradiation Study of Highâ€Dose Protonâ€irradiated Feâ€“Cu Model Alloys by Positron Annihilation and Nanoindentation. Physica Status Solidi (B): Basic Research, 2021, 258, 2000458.	0.7	0
31	Study of Interaction Mechanism between Positrons and Ag Clusters in Dilute Alâ€“Ag Alloys at Low Temperature. Materials, 2021, 14, 1451.	1.3	4
32	Thermal kinetics of micro-defects in He-ion implanted W and W5Re alloys. Tungsten, 2021, 3, 89-100.	2.0	3
33	Investigation of the interaction between hydrogen and irradiation defects in titanium by using positron annihilation spectroscopy. International Journal of Hydrogen Energy, 2021, 46, 13162-13170.	3.8	12
34	Amorphous Domains in Black Titanium Dioxide. Advanced Materials, 2021, 33, e2100407.	11.1	36
35	Investigation of spatial relationship between helium bubbles and dislocation loops in RAFM steel. Journal of Nuclear Materials, 2021, 548, 152862.	1.3	16
36	Depth distributions of cavities in advanced ferritic/martensitic and austenitic steelsÂwith high helium preimplantation and high damage level. Materials Today Energy, 2021, 20, 100687.	2.5	11

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37	Oxygen vacancy-rich hierarchical BiOBr hollow microspheres with dramatic CO2 photoreduction activity. Journal of Colloid and Interface Science, 2021, 593, 231-243.	5.0	117
38	Structural rejuvenation in a Zr-based bulk metallic glass via electropulsing treatment. Applied Physics Letters, 2021, 119, .	1.5	5
39	Self-assembled iron-containing mordenite monolith for carbon dioxide sieving. Science, 2021, 373, 315-320.	6.0	179
40	Origination and evolution of point defects in AlN film annealed at high temperature. Journal of Luminescence, 2021, 235, 118032.	1.5	25
41	Vacancy engineered polymeric carbon nitride nanosheets for enhanced photoredox catalytic efficiency. Cell Reports Physical Science, 2021, 2, 100491.	2.8	17
42	Investigation on structural and optical properties of ZnSe thin films prepared by selenization. Superlattices and Microstructures, 2021, 156, 106965.	1.4	7
43	Implantation profiles of muon and secondary positron simulated by Geant4. Physica Scripta, 2021, 96, 125305.	1.2	2
44	Boosting the Catalytic Performance of CeO₂ in Toluene Combustion via the Ceâ€“Ce Homogeneous Interface. Environmental Science & Technology, 2021, 55, 12630-12639.	4.6	71
45	Surface Local Polarization Induced by Bismuthâ€Oxygen Vacancy Pairs Tuning Nonâ€Covalent Interaction for CO₂ Photoreduction. Advanced Energy Materials, 2021, 11, 2102389.	10.2	109
46	The influence of rhenium addition on the distribution of vacancy-type defects in tungsten. Journal of Nuclear Materials, 2021, 553, 153045.	1.3	6
47	Effects of dislocations and hydrogen concentration on hydrogen embrittlement of austenitic 316 stainless steels. Journal of Alloys and Compounds, 2021, 876, 160134.	2.8	19
48	Enhanced photocatalytic activity of BiOFxBr1âˆ’x with H2O2 on degradation of p-nitrophenol. Optik, 2021, 241, 166843.	1.4	4
49	Enhanced desulfurization performance of polyethylene glycol membrane by incorporating metal organic framework MOF-505. Separation and Purification Technology, 2021, 272, 118924.	3.9	17
50	Development of ultrathin polyamide nanofilm with enhanced inner-pore interconnectivity via graphene quantum dots-assembly intercalation for high-performance organic solvent nanofiltration. Journal of Membrane Science, 2021, 635, 119498.	4.1	31
51	The investigation of distribution on size and concentration of helium bubbles in Y-bearing ODS steel using by SAXS and GIXRD. Journal of Nuclear Materials, 2021, 554, 153083.	1.3	4
52	Defects introduced by helium irradiation at different temperatures in W and W-5wt%Re alloy. Fusion Engineering and Design, 2021, 172, 112746.	1.0	6
53	Effect of electrochemical hydrogen charging on defect structure in titanium. Journal of Alloys and Compounds, 2021, 885, 160909.	2.8	10
54	First-principles study of helium in austenitic Fe 6.3 at% Cr alloys: Structural, stability, energetics, and clustering with vacancies. Materials Today Communications, 2021, 29, 102837.	0.9	4

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55	Effects of Nonhydroxyl Oxygen Heteroatoms in Diethylene Glycols on the Properties of 2,5-Furandicarboxylic Acid-Based Polyesters. Biomacromolecules, 2021, 22, 4823-4832.	2.6	12
56	Effects of He-D Interaction on Irradiation-Induced Swelling in Fe9Cr Alloys. Materials, 2021, 14, 6669.	1.3	1
57	Defect evolution in tungsten exposed to helium plasma and deuterium plasmas studied by slow positron beam. Nuclear Materials and Energy, 2021, 29, 101094.	0.6	1
58	Corrosion protection and thermal and mechanical properties for epoxyâ€“thiolâ€“imidazole systems of improved performance. High Performance Polymers, 2020, 32, 242-257.	0.8	2
59	Combining tannic acid-modified support and a green co-solvent for high performance reverse osmosis membranes. Journal of Membrane Science, 2020, 595, 117474.	4.1	41
60	Polyetheramide organic solvent nanofiltration membrane prepared via an interfacial assembly and polymerization procedure. Separation and Purification Technology, 2020, 234, 116033.	3.9	18
61	Studies on the microstructure and magnetic properties of Cu0.97A0.03FeO2 (Aâ€¯=â€¯Ca, Sr, Ba) ceramics. Journal of Magnetism and Magnetic Materials, 2020, 498, 166082.	1.0	6
62	Synergetic effects of defects and acid sites of 2D-ZnO photocatalysts on the photocatalytic performance. Journal of Hazardous Materials, 2020, 385, 121527.	6.5	36
63	Enhanced desulfurization performance of hybrid membranes using embedded hierarchical porous SBA-15. Frontiers of Chemical Science and Engineering, 2020, 14, 661-672.	2.3	7
64	1-methylimidazole as a novel additive for reverse osmosis membrane with high flux-rejection combinations and good stability. Journal of Membrane Science, 2020, 599, 117830.	4.1	39
65	Bis(phenyl)fluorene-based polymer of intrinsic microporosity/functionalized multi-walled carbon nanotubes mixed matrix membranes for enhanced CO2 separation performance. Reactive and Functional Polymers, 2020, 147, 104465.	2.0	26
66	A MOF Glass Membrane for Gas Separation. Angewandte Chemie - International Edition, 2020, 59, 4365-4369.	7.2	325
67	Porous Î²-Bi2O3 with multiple vacancy associates on highly exposed active {220} facets for enhanced photocatalytic activity. Applied Catalysis B: Environmental, 2020, 265, 118563.	10.8	62
68	Electronâ€Ðoping Mottronics in Strongly Correlated Perovskite. Advanced Materials, 2020, 32, e1905060.	11.1	27
69	Preparation and properties of anion exchange membranes with exceptional alkaline stable polymer backbone and cation groups. Journal of Membrane Science, 2020, 596, 117720.	4.1	84
70	Mediation of high temperature radiation damage in bcc iron by Au or Cu precipitation. Nuclear Instruments & Methods in Physics Research B, 2020, 463, 69-75.	0.6	3
71	High boron removal polyamide reverse osmosis membranes by swelling induced embedding of a sulfonyl molecular plug. Journal of Membrane Science, 2020, 597, 117716.	4.1	53
72	Two-dimensional covalent organic frameworks (COF-LZU1) based mixed matrix membranes for pervaporation. Separation and Purification Technology, 2020, 241, 116406.	3.9	33

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73	Mechanistic Insights of the Critical Role of Hydrogen Donor in Controlling Drug Release From Acrylate Adhesive. Journal of Pharmaceutical Sciences, 2020, 109, 1096-1104.	1.6	7
74	Characterization of oxide film in P92 ferritic-martensitic steel exposed to high temperature and pressure water. Journal of Nuclear Materials, 2020, 541, 152406.	1.3	9
75	Achieving the Stable Structure and Superior Performance of Na₃V₂(PO₄)₂O₂F Cathodes via Na-Site Regulation. ACS Applied Energy Materials, 2020, 3, 7649-7658.	2.5	18
76	Surface Engineering to Reduce the Interfacial Resistance for Enhanced Photocatalytic Water Oxidation. ACS Catalysis, 2020, 10, 8742-8750.	5.5	26
77	Defect characteristics, local electron density, and magnetic properties of rare Earth-doped CuFeO2 ceramics. Ceramics International, 2020, 46, 28400-28406.	2.3	10
78	Study on the effect of crosslinking temperature on microporous polyamide membrane structure and its nitrogen/cyclohexane separation performance. Separation and Purification Technology, 2020, 252, 117401.	3.9	8
79	Effect of film thickness on structural and optical properties of ZnS:Cu films prepared by vulcanization. Superlattices and Microstructures, 2020, 146, 106671.	1.4	8
80	Alkali Etching of Layered Double Hydroxide Nanosheets for Enhanced Photocatalytic N₂ Reduction to NH₃. Advanced Energy Materials, 2020, 10, 2002199.	10.2	185
81	Influence of radiation defects on deuterium permeation behavior in tungsten. Journal of Nuclear Materials, 2020, 542, 152455.	1.3	2
82	Inhibitory effect of dislocation on helium irradiation induced damage in Fe-9â€¯wt.Cr alloy. Fusion Engineering and Design, 2020, 161, 111978.	1.0	1
83	Ultrathin heterostructured covalent organic framework membranes with interfacial molecular sieving capacity for fast water-selective permeation. Journal of Materials Chemistry A, 2020, 8, 19328-19336.	5.2	43
84	Roles of Oxygen Vacancies in the Bulk and Surface of CeO₂ for Toluene Catalytic Combustion. Environmental Science & Technology, 2020, 54, 12684-12692.	4.6	231
85	Comparison of oxygen vacancy and interstitial oxygen in KDP and ADP crystals from density functional theory calculations. Computational Materials Science, 2020, 182, 109783.	1.4	16
86	Surface passivation enabled-structural engineering of I-III-VI₂ nanocrystal photocatalysts. Journal of Materials Chemistry A, 2020, 8, 9951-9962.	5.2	12
87	Photocatalytic reduction of CO2 on BiOXï¼š Effect of halogen element type and surface oxygen vacancy mediated mechanism. Applied Catalysis B: Environmental, 2020, 274, 119063.	10.8	243
88	Enhanced photocatalytic destruction of pollutants by surface W vacancies in VW-Bi2WO6 under visible light. Journal of Colloid and Interface Science, 2020, 576, 385-393.	5.0	23
89	Contribution of cryogenic thermal cycling to the atomic dynamics in a La-based bulk metallic glass with different initial states. Journal of Applied Physics, 2020, 127, .	1.1	4
90	Stability and energetics of HenVm complexes in Feâ€“Cr alloys: Ab initio study. Materials Chemistry and Physics, 2020, 253, 123314.	2.0	4

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91	Rapid proton exchange between surface bridging hydroxyls and adsorbed molecules on TiO2. Applied Catalysis B: Environmental, 2020, 277, 119234.	10.8	25
92	Effect of Transition Metal Ion Doping on the Microstructure, Defect Evolution, and Magnetic and Magnetocaloric Properties of CuFeO2 Ceramics. Journal of Superconductivity and Novel Magnetism, 2020, 33, 2881-2890.	0.8	7
93	600 nm-driven photoreduction of CO2 through the topological transformation of layered double hydroxides nanosheets. Applied Catalysis B: Environmental, 2020, 270, 118884.	10.8	46
94	Selenium vacancy-rich and carbon-free VSe₂ nanosheets for high-performance lithium storage. Nanoscale, 2020, 12, 8858-8866.	2.8	22
95	Evolution of vacancy defects in heavy ion irradiated tungsten exposed to helium plasma. Journal of Nuclear Materials, 2020, 532, 152051.	1.3	19
96	Migration behaviour of vacancies and damage structure recovery in a Fe-based Fe-Cr-Mn-Cu-Mo multi-component alloy. Philosophical Magazine, 2020, 100, 1733-1748.	0.7	6
97	Lattice defects and micro-strains in V60Ti25Cr3Fe12 alloy and influence on the ab/desorption of hydrogen. Journal of Alloys and Compounds, 2020, 830, 154675.	2.8	18
98	Ultrathin polyamide nanofilm with an asymmetrical structure: A novel strategy to boost the permeance of reverse osmosis membranes. Journal of Membrane Science, 2020, 612, 118402.	4.1	17
99	Mg-vacancy-induced Ni-vacancy clusters: highly efficient hydrogen production from cellulose. Journal of Materials Chemistry A, 2020, 8, 14697-14705.	5.2	12
100	Exploration of the Synergy Between 2D Nanosheets and a Non-2D Filler in Mixed Matrix Membranes for Gas Separation. Frontiers in Chemistry, 2020, 8, 58.	1.8	22
101	Evolution of defects with isochronal annealing in helium-irradiated 316L studied by slow positron beam. Nuclear Instruments & Methods in Physics Research B, 2020, 467, 80-85.	0.6	5
102	Insight into structural stability and helium diffusion behavior of Feâ€"Cr alloys from first-principles. RSC Advances, 2020, 10, 3277-3292.	1.7	12
103	Efficient electrochemical reduction of carbon dioxide into ethylene boosted by copper vacancies on stepped cuprous oxide. Journal of CO2 Utilization, 2020, 38, 125-131.	3.3	19
104	A MOF Glass Membrane for Gas Separation. Angewandte Chemie, 2020, 132, 4395-4399.	1.6	57
105	Adsorption and oxidation of SO₂ on the surface of TiO₂ nanoparticles: the role of terminal hydroxyl and oxygen vacancyâ€"Ti³⁺ states. Physical Chemistry Chemical Physics, 2020, 22, 9943-9953.	1.3	21
106	Chitosan modified Ti-PILC supported PdOx catalysts for coupling reactions of aryl halides with terminal alkynes. International Journal of Biological Macromolecules, 2020, 158, 67-74.	3.6	6
107	Sensitivity of positrons at hydrogen storage sites in FeCr alloy containing vacancy and helium atom. International Journal of Hydrogen Energy, 2020, 45, 15571-15577.	3.8	15
108	Effect of tissue density on PET spatial resolution in magnetic environment. European Physical Journal Plus, 2020, 135, 1.	1.2	0

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109	Accurately controlling the hierarchical nanostructure of polyamide membranesviaelectrostatic atomization-assisted interfacial polymerization. Journal of Materials Chemistry A, 2020, 8, 9160-9167.	5.2	29
110	Study on the irradiation damage in Fe-based metallic glasses induced by Ne10+ ions. Fusion Engineering and Design, 2020, 157, 111635.	1.0	4
111	The relationship between the doping concentration and d0 ferromagnetism in n-type 4H-SiC. Journal of Applied Physics, 2020, 128, 193901.	1.1	1
112	Blister-dominated retention mechanism in tungsten exposed to high-fluence deuterium plasma. Nuclear Fusion, 2020, 60, 126034.	1.6	20
113	Positron Annihilation Spectroscopy Characterization of Formation of Helium/Hydrogen-Vacancy Nano-Clusters in FeCr Alloy. Acta Physica Polonica A, 2020, 137, 235-237.	0.2	4
114	Effect of Detector Material and Size on Pile-Up Elimination in Positron Burst Measurement. Acta Physica Polonica A, 2020, 137, 152-155.	0.2	0
115	Research progress of hydrogen/helium effects in metal materials by positron annihilation spectroscopy. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 177801.	0.2	5
116	Positron Burst Detection Based on Silicon Photomultiplier Arrays and DRS4. Acta Physica Polonica A, 2020, 137, 160-163.	0.2	1
117	Hybrid membranes with Cu(II) loaded metal organic frameworks for enhanced desulfurization performance. Separation and Purification Technology, 2019, 210, 258-267.	3.9	31
118	Elevated Pervaporative Desulfurization Performance of Pebax-Ag⁺@MOFs Hybrid Membranes by Integrating Multiple Transport Mechanisms. Industrial & Engineering Chemistry Research, 2019, 58, 16911-16921.	1.8	15
119	Migration of carbon from Ga sites to N sites in GaN: a combined PAS and hybrid DFT study. Japanese Journal of Applied Physics, 2019, 58, 090901.	0.8	6
120	Effect of interaction between H and He on micro-defects in Fe9Cr alloy investigated by slow positron beam. Journal of Nuclear Materials, 2019, 526, 151748.	1.3	12
121	The effect of oxygen vacancies in ZnO at an Au/ZnO interface on its catalytic selective oxidation of glycerol. Journal of Catalysis, 2019, 377, 271-282.	3.1	64
122	Synergistic effect of internal electric field and oxygen vacancy on the photocatalytic activity of BiOBrxI1â^'x with isomorphous fluorine substitution. Journal of Colloid and Interface Science, 2019, 554, 500-511.	5.0	55
123	Evolution of microstructures and hardening property of initial irradiated, post-irradiation annealed and re-irradiated Chinese-type low-Cu reactor pressure vessel steel. Journal of Nuclear Materials, 2019, 523, 333-341.	1.3	17
124	Defect Modulation of Z-Scheme TiO₂/Cu₂O Photocatalysts for Durable Water Splitting. ACS Catalysis, 2019, 9, 8346-8354.	5.5	146
125	Effect of low temperature vulcanization time on the structure and optical properties of ZnS thin films. Applied Surface Science, 2019, 498, 143876.	3.1	13
126	Simulation for the correlation of positron annihilation rate with charge density near defects in iron. Nuclear Instruments & Methods in Physics Research B, 2019, 461, 88-92.	0.6	2

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127	Investigation on the activation mechanism of hydrogen absorption in TiZrNbTa high entropy alloy. Journal of Alloys and Compounds, 2019, 781, 613-620.	2.8	62
128	Impact of Li doping on the microstructure, defects, and physical properties of CuFeO2 multiferroic ceramics. Ceramics International, 2019, 45, 24570-24577.	2.3	21
129	Oxygen-Cluster-Modified Anatase with Graphene Leads to Efficient and Recyclable Photo-Catalytic Conversion of CO2 to CH4 Supported by the Positron Annihilation Study. Scientific Reports, 2019, 9, 13103.	1.6	27
130	Influence of nanochannel structure on helium-vacancy cluster evolution and helium retention. Journal of Nuclear Materials, 2019, 527, 151822.	1.3	18
131	Band gap engineering of BiOI via oxygen vacancies induced by graphene for improved photocatalysis. New Journal of Chemistry, 2019, 43, 1523-1530.	1.4	26
132	Interface engineering of mixed matrix membrane via CO2-philic polymer brush functionalized graphene oxide nanosheets for efficient gas separation. Journal of Membrane Science, 2019, 586, 23-33.	4.1	42
133	SIFSIX-3-Zn/PIM-1 mixed matrix membranes with enhanced permeability for propylene/propane separation. Journal of Membrane Science, 2019, 588, 117201.	4.1	45
134	Highly Selective Photoreduction of CO₂ with Suppressing H₂ Evolution over Monolayer Layered Double Hydroxide under Irradiation above 600â€…nm. Angewandte Chemie, 2019, 131, 11986-11993.	1.6	47
135	Highly Selective Photoreduction of CO₂ with Suppressing H₂ Evolution over Monolayer Layered Double Hydroxide under Irradiation above 600â€…nm. Angewandte Chemie - International Edition, 2019, 58, 11860-11867.	7.2	224
136	High-temperature dielectrics based on (1-y)[(1-x)Bi0.5Na0.5TiO3-xBiAlO3]-yCaZrO3 ternary system with stable permittivity and low dielectric loss in a wide temperature range. Journal of the European Ceramic Society, 2019, 39, 4160-4167.	2.8	40
137	Tunable PMA and Interfacial Microstructure Induced by a Hf(HfO 2) Interfacial Spacer in MTJs with Two MgO Layers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900089.	0.8	1
138	Investigation of organophilic montmorillonites supported palladium catalytic composites by combined positron annihilation lifetime spectroscopy and X-ray diffraction. Radiation Physics and Chemistry, 2019, 165, 108343.	1.4	4
139	Investigation of the surface microstructure evolution of silicone rubber during corona discharge via slow positron beam and electrochemical impedance spectroscopy. Plasma Processes and Polymers, 2019, 16, 1900057.	1.6	6
140	Concurrent Improvement of Photocarrier Separation and Extraction in ZnO Nanocrystal Ultraviolet Photodetectors. Journal of Physical Chemistry C, 2019, 123, 14766-14773.	1.5	21
141	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie - International Edition, 2019, 58, 9464-9469.	7.2	226
142	Beyond 1Tâ€phase? Synergistic Electronic Structure and Defects Engineering in 2Hâ€MoS_{2x}Se_{2(1â€x)} Nanosheets for Enhanced Hydrogen Evolution Reaction and Sodium Storage. ChemCatChem, 2019, 11, 3200-3211.	1.8	21
143	Defectâ€Tailoring Mediated Electronâ€“Hole Separation in Singleâ€Unitâ€Cell Bi₃O₄Br Nanosheets for Boosting Photocatalytic Hydrogen Evolution and Nitrogen Fixation. Advanced Materials, 2019, 31, e1807576.	11.1	311
144	Generating Defectâ€Rich Bismuth for Enhancing the Rate of Nitrogen Electroreduction to Ammonia. Angewandte Chemie, 2019, 131, 9564-9569.	1.6	47

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145	The effect of interfacial oxygen migration on the PMA and thermal stability in MTJ with double MgO layers. Applied Surface Science, 2019, 488, 30-35.	3.1	15
146	Effects of the Ï€-electrons in fused polycyclic aromatic hydrocarbons on positron annihilation. Radiation Physics and Chemistry, 2019, 163, 39-44.	1.4	0
147	Study on vacancy-type defects in SIMP steel induced by separate and sequential H and He ion implantation. Journal of Nuclear Materials, 2019, 520, 131-139.	1.3	21
148	Nanoparticle-Assembled Thin Film with Amphipathic Nanopores for Organic Solvent Nanofiltration. ACS Applied Materials & Interfaces, 2019, 11, 17804-17813.	4.0	44
149	A loosely stacked lamellar membrane of irregular MoS₂ flakes for ultrahigh water and organics permeation. Journal of Materials Chemistry A, 2019, 7, 12698-12705.	5.2	36
150	Interfacial Property Modulation of PIM-1 through Polydopamine-Derived Submicrospheres for Enhanced CO₂/N₂ Separation Performance. ACS Applied Materials & Interfaces, 2019, 11, 19613-19622.	4.0	30
151	Reduced blister quantity in damaged tungsten exposed to deuterium plasma. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	3
152	Hydrogen isotope permeation and retention behavior in the CoCrFeMnNi high-entropy alloy. Journal of Nuclear Materials, 2019, 522, 41-44.	1.3	11
153	Influence of intrinsic or extrinsic doping on lattice locations of carbon in semi-insulating GaN. Applied Physics Express, 2019, 12, 061002.	1.1	8
154	Study of the effects of source type and magnetic field on the spatial distribution of positron annihilation events in PET/MRI applications. European Physical Journal Plus, 2019, 134, 1.	1.2	1
155	Point-Defect Distribution and Transformation Near the Surfaces of AlGaN Films Grown by MOCVD. Journal of Physical Chemistry C, 2019, 123, 8865-8870.	1.5	11
156	Influence of low-temperature sulfidation on the structure of ZnS thin films. Chinese Physics B, 2019, 28, 024214.	0.7	1
157	Effect of Y2O3 particles on the helium ion irradiation damage of W-2%Y2O3 composite prepared by wet chemical method. Materialia, 2019, 6, 100268.	1.3	14
158	Design of a high-sampling-rate electronic module for array-detector positron annihilation lifetime measurements. Radiation Detection Technology and Methods, 2019, 3, 1.	0.4	3
159	Investigations of Ti-substituted CuFeO2 ceramics on the structure, defects, the local electron density and magnetic properties. Journal of Magnetism and Magnetic Materials, 2019, 484, 279-285.	1.0	12
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