

# Ho Won Jang

## 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.

484  
papers

16,775  
citations

66  
h-index

105  
g-index

540  
ext. papers

20,831  
ext. citations

7.6  
avg, IF

7.28  
L-index

#	Paper	IF	Citations
484	Visible Light Driven Ultrasensitive and Selective NO Detection in Tin Oxide Nanoparticles with Sulfur Doping Assisted by l-Cysteine.. <i>Small</i> , <b>2022</b> , e2106613	11	2
483	Surface-Tailored Medium Entropy Alloys as Radically Low Overpotential Oxygen Evolution Electrocatalysts.. <i>Small</i> , <b>2022</b> , e2105611	11	6
482	Architecture engineering of nanostructured catalyst via layer-by-layer adornment of multiple nanocatalysts on silica nanorod arrays for hydrogenation of nitroarenes.. <i>Scientific Reports</i> , <b>2022</b> , 12, 2	4.9	1
481	Epitaxial Growth of Alpha Gallium Oxide Thin Films on Sapphire Substrates for Electronic and Optoelectronic Devices: Progress and Perspective. <i>Electronic Materials Letters</i> , <b>2022</b> , 18, 113	2.9	6
480	Controlled Band Offsets in Ultrathin Hematite for Enhancing the Photoelectrochemical Water Splitting Performance of Heterostructured Photoanodes.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	2
479	Low-Crystalline AuCuIn Catalyst for Gaseous CO $\square$ Electrolyzer.. <i>Advanced Science</i> , <b>2022</b> , e2104908	13.6	1
478	Crystal Facet Engineering of TiO Nanostructures for Enhancing Photoelectrochemical Water Splitting with BiVO Nanodots.. <i>Nano-Micro Letters</i> , <b>2022</b> , 14, 48	19.5	2
477	HRTEM study and mechanical properties of ZrB $\square$ BiC composite: An insight into in-situ carbon formation over the SPS process. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2022</b> , 104, 105789	4.1	0
476	Memristive Devices Based on Two-Dimensional Transition Metal Chalcogenides for Neuromorphic Computing.. <i>Nano-Micro Letters</i> , <b>2022</b> , 14, 58	19.5	8
475	High Hole Mobility Inorganic Halide Perovskite Field-Effect Transistors with Enhanced Phase Stability and Interfacial Defect Tolerance. <i>Advanced Electronic Materials</i> , <b>2022</b> , 8, 2100624	6.4	2
474	Sandwich-like Co(OH) $\square$ /Ag/Co(OH) $\square$ nanosheet composites for oxygen evolution reaction in anion exchange membrane water electrolyzer. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 889, 161674	5.7	3
473	Bi catalysts supported on GaN nanowires toward efficient photoelectrochemical CO $\square$ reduction. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 7869-7877	13	3
472	MOF-derived NiFe $\square$ nanoparticles on molybdenum disulfide: Magnetically reusable nanocatalyst for the reduction of nitroaromatics in aqueous media. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2022</b> , 107, 428-435	6.3	2
471	Microstructure of spark plasma sintered TiC $\square$ Bi $\square$ BiCw composite. <i>Materials Chemistry and Physics</i> , <b>2022</b> , 281, 125877	4.4	0
470	Chemical modification of ordered/disordered carbon nanostructures for metal hosts and electrocatalysts of lithium-air batteries. <i>Informa<math>\square</math>Materials</i> , <b>2022</b> , 4,	23.1	1
469	Carbohydrate-based nanostructured catalysts: applications in organic transformations. <i>Materials Today Chemistry</i> , <b>2022</b> , 24, 100869	6.2	3
468	Fast responding and highly reversible gasochromic H $\square$ sensor using Pd-decorated amorphous WO $\square$ thin films. <i>Chemical Engineering Journal</i> , <b>2022</b> , 446, 136862	14.7	1

467	Rationally Designed TiO Nanostructures of Continuous Pore Network for Fast-Responding and Highly Sensitive Acetone Sensor.. <i>Small Methods</i> , <b>2021</b> , 5, e2100941	12.8	3
466	Electron strain-driven phase transformation in transition-metal-co doped MoTe2 for electrocatalytic hydrogen evolution. <i>Chemical Engineering Journal</i> , <b>2021</b> , 433, 133768	14.7	2
465	CoMo heterohierarchical foam-structured cathode for anion exchange membrane water electrolyzer. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 47, 2093-2093	6.7	1
464	Artificial Adaptive and Maladaptive Sensory Receptors Based on a Surface-Dominated Diffusive Memristor. <i>Advanced Science</i> , <b>2021</b> , e2103484	13.6	8
463	Layer dependence of out-of-plane electrical conductivity and Seebeck coefficient in continuous mono- to multilayer MoS2 films. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 26896-26903	13	0
462	Strong Fermi-level pinning at metal contacts to halide perovskites. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 15212-15220	7.1	3
461	Strain relaxation and dislocation annihilation in compositionally graded $\text{H}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ layer for high voltage $\text{HGa}_2\text{O}_3$ power devices. <i>Acta Materialia</i> , <b>2021</b> , 221, 117423	8.4	3
460	Boosting Unassisted Alkaline Solar Water Splitting Using Silicon Photocathode with TiO2 Nanorods Decorated by Edge-Rich MoS2 Nanoplates (Small 39/2021). <i>Small</i> , <b>2021</b> , 17, 2170206	11	
459	Surface Treatment of Mixed-Halide CsPb(BrxI1-x)3 Perovskite Quantum Dots for Thermal Stability Enhancement. <i>Materials Research Bulletin</i> , <b>2021</b> , 146, 111622	5.1	1
458	Synergistic Catalysis of the Lattice Oxygen and Transition Metal Facilitating ORR and OER in Perovskite Catalysts for LiO2 Batteries. <i>ACS Catalysis</i> , <b>2021</b> , 11, 424-434	13.1	27
457	Direct Synthesis of Molybdenum Phosphide Nanorods on Silicon Using Graphene at the Heterointerface for Efficient Photoelectrochemical Water Reduction. <i>Nano-Micro Letters</i> , <b>2021</b> , 13, 81	19.5	6
456	Hierarchical Nanoporous BiVO Photoanodes with High Charge Separation and Transport Efficiency for Water Oxidation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 14291-14301	9.5	7
455	3D Bioprinted Bacteriostatic Hyperelastic Bone Scaffold for Damage-Specific Bone Regeneration. <i>Polymers</i> , <b>2021</b> , 13,	4.5	8
454	Electrochemical conversion of carbon dioxide over silver-based catalysts: Recent progress in cathode structure and interface engineering. <i>Chemical Engineering Science</i> , <b>2021</b> , 234, 116403	4.4	5
453	Characterization and FEA evaluation of a ZrB2BiC ceramic containing TaC for beam-column joint application. <i>Ceramics International</i> , <b>2021</b> , 47, 11438-11450	5.1	5
452	Microstructural evolution during spark plasma sintering of TiC/AlN/graphene ceramics. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2021</b> , 96, 105496	4.1	2
451	Edge-exposed WS2 on 1D nanostructures for highly selective NO2 sensor at room temperature. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 333, 129566	8.5	8
450	Microscopic evidence of strong interactions between chemical vapor deposited 2D MoS film and SiO growth template. <i>Nano Convergence</i> , <b>2021</b> , 8, 11	9.2	8

449	Hydrothermally exfoliated P-doped g-C <sub>3</sub> N <sub>4</sub> decorated with gold nanorods for highly efficient reduction of 4-nitrophenol. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2021</b> , 614, 126187	5.1	14
448	g-C <sub>3</sub> N <sub>4</sub> nanosheet adorned with Ag <sub>3</sub> BiO <sub>3</sub> as a perovskite: An effective photocatalyst for efficient visible-light photocatalytic processes. <i>Materials Science in Semiconductor Processing</i> , <b>2021</b> , 125, 105651	4.3	15
447	Tailoring the Structure of Low-Dimensional Halide Perovskite through a Room Temperature Solution Process: Role of Ligands.. <i>Small Methods</i> , <b>2021</b> , 5, e2100054	12.8	2
446	Copper-Coated Polypropylene Filter Face Mask with SARS-CoV-2 Antiviral Ability. <i>Polymers</i> , <b>2021</b> , 13,	4.5	21
445	Surface-tailored graphene channels. <i>Npj 2D Materials and Applications</i> , <b>2021</b> , 5,	8.8	3
444	Dendritic Network Implementable Organic Neurofiber Transistors with Enhanced Memory Cyclic Endurance for Spatiotemporal Iterative Learning. <i>Advanced Materials</i> , <b>2021</b> , 33, e2100475	24	12
443	Enhanced Optical Properties and Stability of CsPbBr <sub>3</sub> Nanocrystals Through Nickel Doping. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102770	15.6	20
442	BN-Fe <sub>3</sub> O <sub>4</sub> -Pd nanocomposite modified carbon paste electrode: Efficient voltammetric sensor for sulfamethoxazole. <i>Ceramics International</i> , <b>2021</b> , 47, 13903-13911	5.1	9
441	Nanomaterials modified electrodes for electrochemical detection of Sudan I in food. <i>Journal of Food Measurement and Characterization</i> , <b>2021</b> , 15, 3837-3852	2.8	40
440	Hydrothermal self - sacrificing growth of polymorphous MnO <sub>2</sub> on magnetic porous - carbon (Fe <sub>3</sub> O <sub>4</sub> @Cg/MnO <sub>2</sub> ): A sustainable nanostructured catalyst for activation of molecular oxygen. <i>Molecular Catalysis</i> , <b>2021</b> , 509, 111603	3.3	9
439	Preliminary Validation of a Continuum Model for Dimple Patterns on Polyethylene Naphthalate via Ar Ion Beam Sputtering. <i>Polymers</i> , <b>2021</b> , 13,	4.5	1
438	Crucial role of heterostructures in highly advanced water splitting photoelectrodes. <i>Current Opinion in Green and Sustainable Chemistry</i> , <b>2021</b> , 29, 100454	7.9	5
437	Characterization of TiC ceramics with SiC and/or WC additives using electron microscopy and electron probe micro-analysis. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2021</b> ,	5.3	1
436	Visible-Light-Activated Type II Heterojunction in Cu(hexahydroxytriphenylene)/FeO Hybrids for Reversible NO Sensing: Critical Role of $\pi$ Transition. <i>ACS Central Science</i> , <b>2021</b> , 7, 1176-1182	16.8	10
435	Gas sensing materials roadmap. <i>Journal of Physics Condensed Matter</i> , <b>2021</b> , 33,	1.8	15
434	High performance of screen-printed graphite electrode modified with NiMo-MOF for voltammetric determination of amaranth. <i>Journal of Food Measurement and Characterization</i> , <b>2021</b> , 15, 4617-4622	2.8	32
433	Core-shell architecture of NiSe <sub>2</sub> nanoparticles@nitrogen-doped carbon for hydrogen evolution reaction in acidic and alkaline media. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 20463	4.5	4
432	Surface-Modified Co-doped ZnO Photoanode for Photoelectrochemical Oxidation of Glycerol. <i>Catalysis Today</i> , <b>2021</b> , 359, 43-49	5.3	14

431	Grain Boundaries Boost Oxygen Evolution Reaction in NiFe Electrocatalysts.. <i>Small Methods</i> , <b>2021</b> , 5, e2000755	12.8	7
430	Dendritic gold-supported iridium/iridium oxide ultra-low loading electrodes for high-performance proton exchange membrane water electrolyzer. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 283, 119596	21.8	18
429	Metal-organic framework-derived MoS <sub>x</sub> composites as efficient electrocatalysts for hydrogen evolution reaction. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 852, 156952	5.7	21
428	Synthesis of atomically thin alloyed molybdenum-tungsten disulfides thin films as hole transport layers in organic light-emitting diodes. <i>Applied Surface Science</i> , <b>2021</b> , 541, 148529	6.7	2
427	Enhanced Spin Seebeck Thermopower in Pt/Holey MoS <sub>2</sub> /YFeO Hybrid Structure. <i>Nano Letters</i> , <b>2021</b> , 21, 189-196	11.5	9
426	Biocompatibility and mechanical properties of pigeon bone waste extracted natural nano-hydroxyapatite for bone tissue engineering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2021</b> , 264, 114950	3.1	15
425	Optically Activated 3D Thin-Shell TiO <sub>2</sub> for Super-Sensitive Chemosensitive Responses: Toward Visible Light Activation. <i>Advanced Science</i> , <b>2021</b> , 8, 2001883	13.6	13
424	Colorimetric Sensors for Toxic and Hazardous Gas Detection: A Review. <i>Electronic Materials Letters</i> , <b>2021</b> , 17, 1-17	2.9	19
423	Tailored Graphene Micropatterns by Wafer-Scale Direct Transfer for Flexible Chemical Sensor Platform. <i>Advanced Materials</i> , <b>2021</b> , 33, e2004827	24	20
422	Competing memristors for brain-inspired computing. <i>IScience</i> , <b>2021</b> , 24, 101889	6.1	13
421	Light-activated gas sensing: a perspective of integration with micro-LEDs and plasmonic nanoparticles. <i>Materials Advances</i> , <b>2021</b> , 2, 827-844	3.3	18
420	Suppression of metal-to-insulator transition using strong interfacial coupling at cubic and orthorhombic perovskite oxide heterointerfaces. <i>Nanoscale</i> , <b>2021</b> , 13, 708-715	7.7	
419	Effects of SiC on densification, microstructure and nano-indentation properties of ZrB <sub>2</sub> /BN composites. <i>Ceramics International</i> , <b>2021</b> , 47, 9873-9880	5.1	5
418	Synthesis of MoS <sub>x</sub> /Ni-metal-organic framework-74 composites as efficient electrocatalysts for hydrogen evolution reactions. <i>International Journal of Energy Research</i> , <b>2021</b> , 45, 9638-9647	4.5	10
417	Metal-free nanostructured catalysts: sustainable driving forces for organic transformations. <i>Green Chemistry</i> , <b>2021</b> , 23, 6223-6272	10	19
416	Performance of metal-organic frameworks in the electrochemical sensing of environmental pollutants. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 8195-8220	13	48
415	Bn <sub>2</sub> S <sub>3</sub> as Water Splitting Photoanodes: Promise and Challenges. <i>Electronic Materials Letters</i> , <b>2021</b> , 17, 119-135	2.9	2
414	Recent Developments in Polymer Nanocomposite-Based Electrochemical Sensors for Detecting Environmental Pollutants.. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 1112-1136	3.9	55

413	MOF-Based Hybrids for Solar Fuel Production. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003052	21.8	25
412	Substantially improved room temperature NO <sub>2</sub> sensing in 2-dimensional SnS <sub>2</sub> nanoflowers enabled by visible light illumination. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 11168-11178	13	24
411	Synthesis and characterization of bipyridine cobalt(ii) complex modified graphite screen printed electrode: an electrochemical sensor for simultaneous detection of acetaminophen and naproxen.. <i>RSC Advances</i> , <b>2021</b> , 11, 3049-3057	3.7	7
410	Recent developments in voltammetric and amperometric sensors for cysteine detection.. <i>RSC Advances</i> , <b>2021</b> , 11, 5411-5425	3.7	12
409	Recent development of high-performance photocatalysts for N <sub>2</sub> fixation: A review. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 9, 104997	6.8	11
408	Light-Activated Gas Sensors: Optically Activated 3D Thin-Shell TiO <sub>2</sub> for Super-Sensitive Chemoresistive Responses: Toward Visible Light Activation (Adv. Sci. 3/2021). <i>Advanced Science</i> , <b>2021</b> , 8, 2170012	13.6	78
407	Ferroelectric field effect transistors: Progress and perspective. <i>APL Materials</i> , <b>2021</b> , 9, 021102	5.7	28
406	Fabrication of g-C <sub>3</sub> N <sub>4</sub> /Au nanocomposite using laser ablation and its application as an effective catalyst in the reduction of organic pollutants in water. <i>Ceramics International</i> , <b>2021</b> , 47, 3565-3572	5.1	23
405	Electrochemical Detection of Hydrazine by Carbon Paste Electrode Modified with Ferrocene Derivatives, Ionic Liquid, and CoS-Carbon Nanotube Nanocomposite. <i>ACS Omega</i> , <b>2021</b> , 6, 4641-4648	3.9	15
404	Hybrid Photocatalysts: MOF-Based Hybrids for Solar Fuel Production (Adv. Energy Mater. 27/2021). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2170106	21.8	1
403	Neurofiber Transistors: Dendritic Network Implementable Organic Neurofiber Transistors with Enhanced Memory Cyclic Endurance for Spatiotemporal Iterative Learning (Adv. Mater. 26/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170202	24	3
402	Catalyze Materials Science with Machine Learning <b>2021</b> , 3, 1151-1171		4
401	Fe <sub>2</sub> O <sub>3</sub> nanostructure-based gas sensors. <i>Journal of Sensor Science and Technology</i> , <b>2021</b> , 30, 210-217	0.3	0
400	Insights into the hydrogen adsorption on deposited graphene oxide by zirconia and gold nanoparticles. <i>Journal of Physics and Chemistry of Solids</i> , <b>2021</b> , 154, 110061	3.9	4
399	Boosting Unassisted Alkaline Solar Water Splitting Using Silicon Photocathode with TiO Nanorods Decorated by Edge-Rich MoS Nanoplates. <i>Small</i> , <b>2021</b> , 17, e2103457	11	8
398	From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. <i>Exploration</i> , <b>2021</b> , 1, 9-20		13
397	Vertically aligned MoS <sub>2</sub> thin film catalysts with Fe-Ni sulfide nanoparticles by one-step sulfurization for efficient solar water reduction. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129369	14.7	8
396	Activity and stability of Ir-based gas diffusion electrode for proton exchange membrane water electrolyzer. <i>Chemical Engineering Journal</i> , <b>2021</b> , 420, 127696	14.7	4

395	Near-complete charge separation in tailored BiVO <sub>4</sub> -based heterostructure photoanodes toward artificial leaf. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 293, 120217	21.8	17
394	Prussian blue-based nanostructured materials: Catalytic applications for environmental remediation and energy conversion. <i>Molecular Catalysis</i> , <b>2021</b> , 514, 111835	3.3	8
393	Crystal Facet-Controlled Efficient SnS Photocathodes for High Performance Bias-Free Solar Water Splitting. <i>Advanced Science</i> , <b>2021</b> , 8, e2102458	13.6	4
392	A screen printed electrode modified with FeO@polypyrrole-Pt core-shell nanoparticles for electrochemical detection of 6-mercaptopurine and 6-thioguanine. <i>Talanta</i> , <b>2021</b> , 232, 122379	6.2	35
391	Recent progress and challenges in photocatalytic water splitting using layered double hydroxides (LDH) based nanocomposites. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> ,	6.7	5
390	Role of TiCN addition on the characteristics of reactive spark plasma sintered ZrB <sub>2</sub> -based novel composites. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 875, 159901	5.7	2
389	Halide Perovskites for Memristive Data Storage and Artificial Synapses. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 8999-9010	6.4	8
388	Hydrothermally obtained type-II heterojunction nanostructures of In <sub>2</sub> S <sub>3</sub> / TiO <sub>2</sub> for remarkably enhanced photoelectrochemical water splitting. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 295, 120276	21.8	26
387	Polymer incorporated magnetic nanoparticles: Applications for magneto-responsive targeted drug delivery. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2021</b> , 272, 115358	3.1	13
386	Stable and multicolored electrochromic device based on polyaniline-tungsten oxide hybrid thin film. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 882, 160718	5.7	4
385	Magnetic nanocomposite of crosslinked chitosan with 4,6-diacetylresorcinol for gold immobilization (Fe <sub>3</sub> O <sub>4</sub> @CS/DAR-Au) as a catalyst for an efficient one-pot synthesis of propargylamine. <i>Materials Today Communications</i> , <b>2021</b> , 29, 102798	2.5	10
384	Voltage-dependent gas discrimination using self-activated graphene with Pt decoration. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 349, 130696	8.5	1
383	Comparison of fractal dimensions from nitrogen adsorption data in shale different models.. <i>RSC Advances</i> , <b>2021</b> , 11, 2298-2306	3.7	11
382	Electrodeposited Heterogeneous Nickel-Based Catalysts on Silicon for Efficient Sunlight-Assisted Water Splitting. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100219	6.1	8
381	A novel spark plasma sintered TiC/ZrNi <sub>2</sub> composite with enhanced flexural strength. <i>Ceramics International</i> , <b>2020</b> , 46, 29022-29032	5.1	11
380	All-Solution-Processed BiVO <sub>4</sub> /TiO <sub>2</sub> Photoanode with NiCo <sub>2</sub> O <sub>4</sub> Nanofiber Cocatalyst for Enhanced Solar Water Oxidation. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5646-5656	6.1	11
379	Pd modified prussian blue frameworks: Multiple electron transfer pathways for improving catalytic activity toward hydrogenation of nitroaromatics. <i>Molecular Catalysis</i> , <b>2020</b> , 492, 110967	3.3	20
378	Electrochemical activity of Samarium on starch-derived porous carbon: rechargeable Li- and Al-ion batteries. <i>Nano Convergence</i> , <b>2020</b> , 7, 11	9.2	11

377	Recent Advances in Rechargeable Aluminum-Ion Batteries and Considerations for Their Future Progress. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 6019-6035	6.1	27
376	Manufacturing ZrB-SiC-TaC Composite: Potential Application for Aircraft Wing Assessed by Frequency Analysis through Finite Element Model. <i>Materials</i> , <b>2020</b> , 13,	3.5	10
375	Covalent Organic Frameworks: Emerging Organic Solid Materials for Energy and Electrochemical Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 27821-27852	9.5	44
374	Lead-free all-inorganic halide perovskite quantum dots: review and outlook. <i>Journal of the Korean Ceramic Society</i> , <b>2020</b> , 57, 455-479	2.2	25
373	Recent progress of two-dimensional materials and metal-organic framework-based taste sensors. <i>Journal of the Korean Ceramic Society</i> , <b>2020</b> , 57, 353-367	2.2	14
372	Developments and applications of nanomaterial-based carbon paste electrodes.. <i>RSC Advances</i> , <b>2020</b> , 10, 21561-21581	3.7	32
371	Recent Advances in the Aptamer-Based Electrochemical Biosensors for Detecting Aflatoxin B1 and Its Pertinent Metabolite Aflatoxin M1. <i>Sensors</i> , <b>2020</b> , 20,	3.8	16
370	Recent Advances in Electrochemical Sensors and Biosensors for Detecting Bisphenol A. <i>Sensors</i> , <b>2020</b> , 20,	3.8	28
369	Adsorption based realistic molecular model of amorphous kerogen.. <i>RSC Advances</i> , <b>2020</b> , 10, 23312-23320	3.7	6
368	Photoelectrochemical Reduction of CO <sub>2</sub> to Syngas by Reduced Ag Catalysts on Si Photocathodes. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 3487	2.6	6
367	Tailored 2D/3D Halide Perovskite Heterointerface for Substantially Enhanced Endurance in Conducting Bridge Resistive Switching Memory. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 17039-17045 <sup>31</sup>	9.5	31
366	Boosting Aerobic Oxidation of Alcohols via Synergistic Effect between TEMPO and a Composite FeO/Cu-BDC/GO Nanocatalyst. <i>ACS Omega</i> , <b>2020</b> , 5, 5182-5191	3.9	33
365	Novel Architecture Titanium Carbide (TiCT) MXene Cocatalysts toward Photocatalytic Hydrogen Production: A Mini-Review. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	63
364	Strategy for controlling the morphology and work function of W <sub>2</sub> C/WS <sub>2</sub> nanoflowers. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 829, 154582	5.7	8
363	Iron molybdenum oxide-modified screen-printed electrode: Application for electrocatalytic oxidation of cabergoline. <i>Microchemical Journal</i> , <b>2020</b> , 157, 104890	4.8	6
362	Towards artificial photosynthesis: Sustainable hydrogen utilization for photocatalytic reduction of CO <sub>2</sub> to high-value renewable fuels. <i>Chemical Engineering Journal</i> , <b>2020</b> , 402, 126184	14.7	55
361	Surface Coverage Dependence of Spin-to-Charge Current across Pt/MoS <sub>2</sub> /YFeO <sub>3</sub> Layers via Longitudinal Spin Seebeck Effect. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 5338-5344	6.4	8
360	Enhanced visible photocatalytic degradation of diclofenac over N-doped TiO <sub>2</sub> assisted with H <sub>2</sub> O <sub>2</sub> : A kinetic and pathway study. <i>Arabian Journal of Chemistry</i> , <b>2020</b> , 13, 8361-8371	5.9	18

359	Influence of C3N4 Precursors on Photoelectrochemical Behavior of TiO2/C3N4 Photoanode for Solar Water Oxidation. <i>Energies</i> , <b>2020</b> , 13, 974	3.1	9
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226	Boosting interfacial charge transfer for efficient water-splitting photoelectrodes: progress in bismuth vanadate photoanodes using various strategies. <i>MRS Communications</i> , <b>2018</b> , 8, 809-822	2.7	8
225	Nonequilibrium Deposition in Epitaxial BiVO <sub>4</sub> Thin Film Photoanodes for Improving Solar Water Oxidation Performance. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 5673-5681	9.6	15
224	Magnetically retrievable nanocomposite adorned with Pd nanocatalysts: efficient reduction of nitroaromatics in aqueous media. <i>Green Chemistry</i> , <b>2018</b> , 20, 3809-3817	10	119
223	A thorough study on electrochromic properties of metal doped tungsten trioxide film prepared by a facile solution process. <i>Electrochimica Acta</i> , <b>2018</b> , 283, 1195-1202	6.7	13
222	Direct Observation of Surface Potential Distribution in Insulation Resistance Degraded Acceptor-Doped BaTiO <sub>3</sub> Multilayered Ceramic Capacitors. <i>Electronic Materials Letters</i> , <b>2018</b> , 14, 629-635 <sup>2.9</sup>	9	9
221	Au decoration of vertical hematite nanotube arrays for further selective detection of acetone in exhaled breath. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 274, 587-594	8.5	21
220	Synthesis of Numerous Edge Sites in MoS via SiO Nanorods Platform for Highly Sensitive Gas Sensor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 31594-31602	9.5	58
219	Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts. <i>Advanced Science</i> , <b>2018</b> , 5, 1800727	13.6	20
218	Transfer of ultrathin molybdenum disulfide and transparent nanomesh electrode onto silicon for efficient heterojunction solar cells. <i>Nano Energy</i> , <b>2018</b> , 50, 649-658	17.1	22
217	Solution-Processed Metal Oxide Thin Film Nanostructures for Water Splitting Photoelectrodes: A Review. <i>Journal of the Korean Ceramic Society</i> , <b>2018</b> , 55, 185-202	2.2	27
216	Room-Temperature Solid-State Grown WO <sub>3</sub> Film on Plastic Substrate for Extremely Sensitive Flexible NO <sub>2</sub> Gas Sensors. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1700811	4.6	15

215	Room temperature humidity sensors based on rGO/MoS2 hybrid composites synthesized by hydrothermal method. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 258, 775-782	8.5	81
214	p-p Heterojunction of Nickel Oxide-Decorated Cobalt Oxide Nanorods for Enhanced Sensitivity and Selectivity toward Volatile Organic Compounds. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 1050-1058	9.5	63
213	Tungsten Trioxide Doped with CdSe Quantum Dots for Smart Windows. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 43785-43791	9.5	11
212	Effects of mobile charged defects on current-voltage behavior in resistive switching memories based on organic-inorganic hybrid perovskite. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 193301	3.4	10
211	Recent Advances in Memristive Materials for Artificial Synapses. <i>Advanced Materials Technologies</i> , <b>2018</b> , 3, 1800457	6.8	102
210	Controlled Synthesis of Vertically Aligned SnO2 Nanograin-Structured Thin Films for SnO2/BiVO4 Core-Shell Heterostructures with Highly Enhanced Photoelectrochemical Properties. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 8501-8509	9.6	27
209	MoSe2/GO/rGO Composite Catalyst for Hydrogen Evolution Reaction. <i>Polymers</i> , <b>2018</b> , 10,	4.5	20
208	Halide Perovskite Quantum Dots for Light-Emitting Diodes: Properties, Synthesis, Applications, and Outlooks. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1800335	6.4	32
207	Triple Planar Heterojunction of SnO2/WO3/BiVO4 with Enhanced Photoelectrochemical Performance under Front Illumination. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 1765	2.6	12
206	Surface extension of MeS2 (Me=Mo or W) nanosheets by embedding MeSx for hydrogen evolution reaction. <i>Electrochimica Acta</i> , <b>2018</b> , 292, 136-141	6.7	26
205	Solar Water Splitting: Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts (Adv. Sci. 10/2018). <i>Advanced Science</i> , <b>2018</b> , 5, 1870061	13.6	78
204	Halide Perovskites: Organic-Inorganic Hybrid Halide Perovskites for Memories, Transistors, and Artificial Synapses (Adv. Mater. 42/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870317	24	6
203	Observation of physisorption in a high-performance FET-type oxygen gas sensor operating at room temperature. <i>Nanoscale</i> , <b>2018</b> , 10, 18019-18027	7.7	28
202	Morphology-Controlled Aluminum-Doped Zinc Oxide Nanofibers for Highly Sensitive NO Sensors with Full Recovery at Room Temperature. <i>Advanced Science</i> , <b>2018</b> , 5, 1800816	13.6	29
201	The role of metal dopants in WS2 nanoflowers in enhancing the hydrogen evolution reaction. <i>Applied Catalysis A: General</i> , <b>2018</b> , 567, 73-79	5.1	47
200	Comprehensive Study on the Morphology Control of TiO2 Nanorods on Foreign Substrates by the Hydrothermal Method. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 6504-6512	3.5	14
199	Understanding hydroscopic properties of silk fibroin and its use as a gate-dielectric in organic field-effect transistors. <i>Organic Electronics</i> , <b>2018</b> , 59, 213-219	3.5	15
198	Decoration of metal oxide surface with {111} form Au nanoparticles using PEGylation.. <i>RSC Advances</i> , <b>2018</b> , 8, 18442-18450	3.7	7

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196	Plasmonic gold nanoparticle-decorated BiVO <sub>4</sub> /ZnO nanowire heterostructure photoanodes for efficient water oxidation. <i>Catalysis Science and Technology</i> , <b>2018</b> , 8, 3759-3766	5.5	27
195	Organic-Inorganic Hybrid Halide Perovskites for Memories, Transistors, and Artificial Synapses. <i>Advanced Materials</i> , <b>2018</b> , 30, e1704002	24	149
194	1D versus 2D Growth of Soluble Acene Crystals from Soluble Acene/Polymer Blends Governed by a Residual Solvent Reservoir in a Phase-Separated Polymer Matrix. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1802875	15.6	14
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192	Substantially enhanced front illumination photocurrent in porous SnO <sub>2</sub> nanorods/networked BiVO <sub>4</sub> heterojunction photoanodes. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14633-14643	13	24
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182	Recent Advances in Bismuth-Based Nanomaterials for Photoelectrochemical Water Splitting. <i>ChemSusChem</i> , <b>2017</b> , 10, 3001-3018	8.3	77
181	Tailoring two-dimensional electron gas conductivity at oxide heterointerfaces. <i>Current Applied Physics</i> , <b>2017</b> , 17, 626-639	2.6	7
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177	Wafer-scale reliable switching memory based on 2-dimensional layered organic-inorganic halide perovskite. <i>Nanoscale</i> , <b>2017</b> , 9, 15278-15285	7.7	83
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175	Electron beam induced epitaxial crystallization in a conducting and insulating a-LaAlO <sub>3</sub> /SrTiO <sub>3</sub> system. <i>RSC Advances</i> , <b>2017</b> , 7, 40279-40285	3.7	8
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138	Role of oxygen functional groups in graphene oxide for reversible room-temperature NO <sub>2</sub> sensing. <i>Carbon</i> , <b>2015</b> , 91, 178-187	10.4	138
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123	Ultrasensitive and sensitive detection of xylene and toluene for monitoring indoor air pollution using Cr-doped NiO hierarchical nanostructures. <i>Nanoscale</i> , <b>2013</b> , 5, 7066-73	7.7	196
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84	Tunneling vs. giant magnetoresistance in organic spin valve. <i>Synthetic Metals</i> , <b>2010</b> , 160, 216-222	3.6	39
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