

Ho Won Jang

List of Publications by Citations

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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	Tunneling electroresistance effect in ferroelectric tunnel junctions at the nanoscale. <i>Nano Letters</i> , 2009 , 9, 3539-43	11.5	454
483	Ferroelastic switching for nanoscale non-volatile magnetoelectric devices. <i>Nature Materials</i> , 2010 , 9, 309-14	27	344
482	Giant piezoelectricity on Si for hyperactive MEMS. <i>Science</i> , 2011 , 334, 958-61	33.3	319
481	One-dimensional oxide nanostructures as gas-sensing materials: review and issues. <i>Sensors</i> , 2010 , 10, 4083-99	3.8	293
480	Domain Engineering for Enhanced Ferroelectric Properties of Epitaxial (001) BiFeO Thin Films. <i>Advanced Materials</i> , 2009 , 21, 817-823	24	251
479	Self-Activated Transparent All-Graphene Gas Sensor with Endurance to Humidity and Mechanical Bending. <i>ACS Nano</i> , 2015 , 9, 10453-60	16.7	220
478	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. <i>Advanced Materials</i> , 2016 , 28, 6562-7	24	219
477	Tailoring a two-dimensional electron gas at the LaAlO ₃ /SrTiO ₃ (001) interface by epitaxial strain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 4720-4724	11.5	207
476	Ferroelectricity in strain-free SrTiO ₃ thin films. <i>Physical Review Letters</i> , 2010 , 104, 197601	7.4	205
475	Strain-induced polarization rotation in epitaxial (001) BiFeO ₃ thin films. <i>Physical Review Letters</i> , 2008 , 101, 107602	7.4	205
474	Shape-controlled bismuth nanoflakes as highly selective catalysts for electrochemical carbon dioxide reduction to formate. <i>Nano Energy</i> , 2017 , 39, 44-52	17.1	203
473	Ultrasensitive and sensitive detection of xylene and toluene for monitoring indoor air pollution using Cr-doped NiO hierarchical nanostructures. <i>Nanoscale</i> , 2013 , 5, 7066-73	7.7	196
472	Metallic and insulating oxide interfaces controlled by electronic correlations. <i>Science</i> , 2011 , 331, 886-9	33.3	193
471	Spin injection/detection using an organic-based magnetic semiconductor. <i>Nature Materials</i> , 2010 , 9, 638-42	27	184
470	Carbon and graphene quantum dots: a review on syntheses, characterization, biological and sensing applications for neurotransmitter determination.. <i>RSC Advances</i> , 2020 , 10, 15406-15429	3.7	177
469	Template engineering of Co-doped BaFe ₂ As ₂ single-crystal thin films. <i>Nature Materials</i> , 2010 , 9, 397-402	27	173
468	Recent progress in the preparation, properties and applications of superhydrophobic nano-based coatings and surfaces: A review. <i>Progress in Organic Coatings</i> , 2019 , 132, 235-256	4.8	164

467	Weak-link behavior of grain boundaries in superconducting Ba(Fe _{1-x} Cox) ₂ As ₂ bicrystals. <i>Applied Physics Letters</i> , 2009 , 95, 212505	3.4	151
466	Wafer-scale transferable molybdenum disulfide thin-film catalysts for photoelectrochemical hydrogen production. <i>Energy and Environmental Science</i> , 2016 , 9, 2240-2248	35.4	150
465	Organic-Inorganic Hybrid Halide Perovskites for Memories, Transistors, and Artificial Synapses. <i>Advanced Materials</i> , 2018 , 30, e1704002	24	149
464	Recent Advances toward High-Efficiency Halide Perovskite Light-Emitting Diodes: Review and Perspective. <i>Small Methods</i> , 2018 , 2, 1700419	12.8	145
463	Role of oxygen functional groups in graphene oxide for reversible room-temperature NO ₂ sensing. <i>Carbon</i> , 2015 , 91, 178-187	10.4	138
462	Air-Stable Cesium Lead Iodide Perovskite for Ultra-Low Operating Voltage Resistive Switching. <i>Advanced Functional Materials</i> , 2018 , 28, 1705783	15.6	130
461	Conformally coated BiVO ₄ nanodots on porosity-controlled WO ₃ nanorods as highly efficient type II heterojunction photoanodes for water oxidation. <i>Nano Energy</i> , 2016 , 28, 250-260	17.1	129
460	Silk Fibroin-Based Biomaterials for Biomedical Applications: A Review. <i>Polymers</i> , 2019 , 11,	4.5	121
459	Magnetically retrievable nanocomposite adorned with Pd nanocatalysts: efficient reduction of nitroaromatics in aqueous media. <i>Green Chemistry</i> , 2018 , 20, 3809-3817	10	119
458	Recent Advances in the Nanocatalysts-assisted NaBH ₄ Reduction of Nitroaromatics in water. <i>ACS Omega</i> , 2019 , 4, 483-495	3.9	119
457	Ohmic contact formation mechanism of Ni on n-type 4HβiC. <i>Applied Physics Letters</i> , 2001 , 79, 1816-1818	3.4	117
456	A new water oxidation catalyst: lithium manganese pyrophosphate with tunable Mn valency. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4201-11	16.4	116
455	Size-Dependent Properties of Two-Dimensional MoS ₂ and WS ₂ . <i>Journal of Physical Chemistry C</i> , 2016 , 120, 10078-10085	3.8	115
454	Low-dimensional halide perovskites: review and issues. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2189-2209	2.7	113
453	Characterization of band bendings on Ga-face and N-face GaN films grown by metalorganic chemical-vapor deposition. <i>Applied Physics Letters</i> , 2002 , 80, 3955-3957	3.4	112
452	Mechanism for the increase of indium-tin-oxide work function by O ₂ inductively coupled plasma treatment. <i>Journal of Applied Physics</i> , 2004 , 95, 586-590	2.5	110
451	Palladium Nanoparticles on Assorted Nanostructured Supports: Applications for Suzuki, Heck, and Sonogashira Cross-Coupling Reactions. <i>ACS Applied Nano Materials</i> , 2020 , 3, 2070-2103	5.6	109
450	Enhanced Endurance Organolead Halide Perovskite Resistive Switching Memories Operable under an Extremely Low Bending Radius. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30764-30771	9.5	109

449	Recent Advances in Memristive Materials for Artificial Synapses. <i>Advanced Materials Technologies</i> , 2018 , 3, 1800457	6.8	102
448	Epitaxial (001) BiFeO ₃ membranes with substantially reduced fatigue and leakage. <i>Applied Physics Letters</i> , 2008 , 92, 062910	3.4	100
447	Inhibition of Ion Migration for Reliable Operation of Organolead Halide Perovskite-Based Metal/Semiconductor/Metal Broadband Photodetectors. <i>Advanced Functional Materials</i> , 2016 , 26, 4213-4222	15.6	97
446	Self-activated ultrahigh chemosensitivity of oxide thin film nanostructures for transparent sensors. <i>Scientific Reports</i> , 2012 , 2, 588	4.9	97
445	Giant magnetoresistance in ferromagnet/organic semiconductor/ferromagnet heterojunctions. <i>Physical Review B</i> , 2009 , 80,	3.3	97
444	Two-dimensional materials as catalysts for solar fuels: hydrogen evolution reaction and CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 430-454	13	87
443	Mechanism for ohmic contact formation of Ni/Ag contacts on p-type GaN. <i>Applied Physics Letters</i> , 2004 , 85, 5920-5922	3.4	85
442	Highly selective and sensitive chemoresistive humidity sensors based on rGO/MoS ₂ van der Waals composites. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5016-5024	13	84
441	Extremely sensitive and selective NO probe based on villi-like WO ₃ nanostructures for application to exhaled breath analyzers. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 10591-6	9.5	84
440	Wafer-scale reliable switching memory based on 2-dimensional layered organic-inorganic halide perovskite. <i>Nanoscale</i> , 2017 , 9, 15278-15285	7.7	83
439	Highly sensitive and selective H ₂ and NO ₂ gas sensors based on surface-decorated WO ₃ nanogloos. <i>Sensors and Actuators B: Chemical</i> , 2014 , 198, 294-301	8.5	83
438	NH ₂ -MIL-125(Ti)/TiO ₂ nanorod heterojunction photoanodes for efficient photoelectrochemical water splitting. <i>Applied Catalysis B: Environmental</i> , 2019 , 244, 511-518	21.8	83
437	Room temperature humidity sensors based on rGO/MoS ₂ hybrid composites synthesized by hydrothermal method. <i>Sensors and Actuators B: Chemical</i> , 2018 , 258, 775-782	8.5	81
436	Two-dimensional transition metal dichalcogenide nanomaterials for solar water splitting. <i>Electronic Materials Letters</i> , 2015 , 11, 323-335	2.9	80
435	Atomically thin two-dimensional materials as hole extraction layers in organolead halide perovskite photovoltaic cells. <i>Journal of Power Sources</i> , 2016 , 319, 1-8	8.9	78
434	Light-Activated Gas Sensors: Optically Activated 3D Thin-Shell TiO ₂ for Super-Sensitive Chemoresistive Responses: Toward Visible Light Activation (Adv. Sci. 3/2021). <i>Advanced Science</i> , 2021 , 8, 2170012	13.6	78
433	Solar Water Splitting: Efficient Water Splitting Cascade Photoanodes with Ligand-Engineered MnO Cocatalysts (Adv. Sci. 10/2018). <i>Advanced Science</i> , 2018 , 5, 1870061	13.6	78
432	Recent Advances in Bismuth-Based Nanomaterials for Photoelectrochemical Water Splitting. <i>ChemSusChem</i> , 2017 , 10, 3001-3018	8.3	77

431	Lead-Free All-Inorganic Cesium Tin Iodide Perovskite for Filamentary and Interface-Type Resistive Switching toward Environment-Friendly and Temperature-Tolerant Nonvolatile Memories. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 8155-8163	9.5	76
430	Synthesis of atomically thin transition metal disulfides for charge transport layers in optoelectronic devices. <i>ACS Nano</i> , 2015 , 9, 4146-55	16.7	76
429	Transition Metal Disulfide Nanosheets Synthesized by Facile Sonication Method for the Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 3929-3935	3.8	76
428	The use of UV/ozone-treated MoS ₂ nanosheets for extended air stability in organic photovoltaic cells. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 13123-8	3.6	76
427	Chemoresistive materials for electronic nose: Progress, perspectives, and challenges. <i>Information Materials</i> , 2019 , 1, 289-316	23.1	71
426	Recent Advances in Applications of Voltammetric Sensors Modified with Ferrocene and Its Derivatives. <i>ACS Omega</i> , 2020 , 5, 2049-2059	3.9	70
425	Phase-transition temperatures of strained single-crystal SrRuO ₃ thin films. <i>Advanced Materials</i> , 2010 , 22, 759-62	24	70
424	Performances of Liquid-Exfoliated Transition Metal Dichalcogenides as Hole Injection Layers in Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2015 , 25, 4512-4519	15.6	69
423	Stripe domain structure in epitaxial (001) BiFeO ₃ thin films on orthorhombic TbScO ₃ substrate. <i>Applied Physics Letters</i> , 2009 , 94, 251911	3.4	69
422	Observation of inductively coupled-plasma-induced damage on n-type GaN using deep-level transient spectroscopy. <i>Applied Physics Letters</i> , 2003 , 82, 1233-1235	3.4	69
421	Perspectives and challenges in multilayer ceramic capacitors for next generation electronics. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 9782-9802	7.1	68
420	Domain-engineered BiFeO ₃ thin-film photoanodes for highly enhanced ferroelectric solar water splitting. <i>Nano Research</i> , 2018 , 11, 642-655	10	67
419	Two-Dimensional Transition Metal Disulfides for Chemoresistive Gas Sensing: Perspective and Challenges. <i>Chemosensors</i> , 2017 , 5, 15	4	66
418	Recent Advances in TiO-Based Photocatalysts for Reduction of CO to Fuels. <i>Nanomaterials</i> , 2020 , 10,	5.4	65
417	A near single crystalline TiO ₂ nanohelix array: enhanced gas sensing performance and its application as a monolithically integrated electronic nose. <i>Analyst, The</i> , 2013 , 138, 443-50	5	65
416	Effect of microstructural change on magnetic property of Mn-implanted p-type GaN. <i>Applied Physics Letters</i> , 2003 , 82, 583-585	3.4	65
415	Trimodally porous SnO ₂ nanospheres with three-dimensional interconnectivity and size tunability: a one-pot synthetic route and potential application as an extremely sensitive ethanol detector. <i>NPG Asia Materials</i> , 2016 , 8, e244-e244	10.3	64
414	Au-decorated WO ₃ cross-linked nanodomains for ultrahigh sensitive and selective sensing of NO ₂ and C ₂ H ₅ OH. <i>RSC Advances</i> , 2013 , 3, 10452	3.7	64

413	Strong vortex pinning in Co-doped BaFe ₂ As ₂ single crystal thin films. <i>Applied Physics Letters</i> , 2010 , 96, 142510	3.4	64
412	Novel Architecture Titanium Carbide (TiCT) MXene Cocatalysts toward Photocatalytic Hydrogen Production: A Mini-Review. <i>Nanomaterials</i> , 2020 , 10,	5.4	63
411	Halide Perovskites for Applications beyond Photovoltaics. <i>Small Methods</i> , 2018 , 2, 1700310	12.8	63
410	Reduced graphene oxide-based materials for electrochemical energy conversion reactions 2019 , 1, 85-108		63
409	Vertically ordered hematite nanotube array as an ultrasensitive and rapid response acetone sensor. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 14779-84	9.5	63
408	p-p Heterojunction of Nickel Oxide-Decorated Cobalt Oxide Nanorods for Enhanced Sensitivity and Selectivity toward Volatile Organic Compounds. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1050-1058	9.5	63
407	Hydrogen Evolution Reaction at Anion Vacancy of Two-Dimensional Transition-Metal Dichalcogenides: Ab Initio Computational Screening. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2049-2055	6.4	62
406	Mechanism for Ohmic contact formation of oxidized Ni/Au on p-type GaN. <i>Journal of Applied Physics</i> , 2003 , 94, 1748-1752	2.5	62
405	Halide perovskites for resistive random-access memories. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5226-5234	7.2	61
404	Ultrasensitive reversible oxygen sensing by using liquid-exfoliated MoS ₂ nanoparticles. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6070-6076	13	61
403	Recent developments in conducting polymers: applications for electrochemistry.. <i>RSC Advances</i> , 2020 , 10, 37834-37856	3.7	61
402	Investigation of Energy Levels and Crystal Structures of Cesium Lead Halides and Their Application in Full-Color Light-Emitting Diodes. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600448	6.4	60
401	Black Phosphorus: Critical Review and Potential for Water Splitting Photocatalyst. <i>Nanomaterials</i> , 2016 , 6,	5.4	60
400	Copper oxide-graphene oxide nanocomposite: efficient catalyst for hydrogenation of nitroaromatics in water. <i>Nano Convergence</i> , 2019 , 6, 6	9.2	59
399	Highly sensitive CO sensors based on cross-linked TiO ₂ hollow hemispheres. <i>Sensors and Actuators B: Chemical</i> , 2010 , 149, 116-121	8.5	59
398	Tailoring Crystallographic Orientations to Substantially Enhance Charge Separation Efficiency in Anisotropic BiVO ₄ Photoanodes. <i>ACS Catalysis</i> , 2018 , 8, 5952-5962	13.1	59
397	Synthesis of Numerous Edge Sites in MoS via SiO Nanorods Platform for Highly Sensitive Gas Sensor. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 31594-31602	9.5	58
396	Substantially enhanced photoelectrochemical performance of TiO ₂ nanorods/CdS nanocrystals heterojunction photoanode decorated with MoS ₂ nanosheets. <i>Applied Catalysis B: Environmental</i> , 2019 , 259, 118102	21.8	58

395	Chemically fluorinated graphene oxide for room temperature ammonia detection at ppb levels. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19116-19125	13	58
394	Recent progress in TiO ₂ -based photocatalysts for hydrogen evolution reaction: A review. <i>Arabian Journal of Chemistry</i> , 2020 , 13, 3653-3671	5.9	58
393	Drastically enhanced hydrogen evolution activity by 2D to 3D structural transition in anion-engineered molybdenum disulfide thin films for efficient Si-based water splitting photocathodes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15534-15542	13	57
392	MXenes: Applications in electrocatalytic, photocatalytic hydrogen evolution reaction and CO ₂ reduction. <i>Molecular Catalysis</i> , 2020 , 486, 110850	3.3	57
391	Two-Dimensional NbS ₂ Gas Sensors for Selective and Reversible NO Detection at Room Temperature. <i>ACS Sensors</i> , 2019 , 4, 2395-2402	9.2	57
390	Recent Electrochemical Applications of Metal-Organic Framework-Based Materials. <i>Crystal Growth and Design</i> , 2020 , 20, 7034-7064	3.5	57
389	Facile synthesis of monodispersed Pd nanocatalysts decorated on graphene oxide for reduction of nitroaromatics in aqueous solution. <i>Research on Chemical Intermediates</i> , 2019 , 45, 599-611	2.8	57
388	Towards artificial photosynthesis: Sustainable hydrogen utilization for photocatalytic reduction of CO ₂ to high-value renewable fuels. <i>Chemical Engineering Journal</i> , 2020 , 402, 126184	14.7	55
387	Recent Developments in Polymer Nanocomposite-Based Electrochemical Sensors for Detecting Environmental Pollutants.. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 1112-1136	3.9	55
386	Tailored NiO _x /Ni Cocatalysts on Silicon for Highly Efficient Water Splitting Photoanodes via Pulsed Electrodeposition. <i>ACS Catalysis</i> , 2018 , 8, 7261-7269	13.1	54
385	Superhydrophobic and antireflective nanoglass-coated glass for high performance solar cells. <i>Nano Research</i> , 2014 , 7, 670-678	10	52
384	Polarized Light-Emitting Diodes Based on Patterned MoS ₂ Nanosheet Hole Transport Layer. <i>Advanced Materials</i> , 2017 , 29, 1702598	24	52
383	Study of defect-dipoles in an epitaxial ferroelectric thin film. <i>Applied Physics Letters</i> , 2010 , 96, 052903	3.4	52
382	Metallicity in LaTiO ₃ thin films induced by lattice deformation. <i>Physical Review B</i> , 2010 , 81,	3.3	50
381	Ferroelectricity in nonstoichiometric SrTiO ₃ films studied by ultraviolet Raman spectroscopy. <i>Applied Physics Letters</i> , 2010 , 97, 142901	3.4	50
380	Room-temperature Ohmic contact on n-type GaN with surface treatment using Cl ₂ inductively coupled plasma. <i>Applied Physics Letters</i> , 2001 , 78, 2015-2017	3.4	50
379	Performance of metal-organic frameworks in the electrochemical sensing of environmental pollutants. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 8195-8220	13	48
378	SnS Nanograins on Porous SiO ₂ Nanorods Template for Highly Sensitive NO Sensor at Room Temperature with Excellent Recovery. <i>ACS Sensors</i> , 2019 , 4, 678-686	9.2	47

377	GaN metal-semiconductor-metal ultraviolet photodetector with IrO ₂ Schottky contact. <i>Applied Physics Letters</i> , 2002 , 81, 4655-4657	3.4	47
376	The role of metal dopants in WS ₂ nanoflowers in enhancing the hydrogen evolution reaction. <i>Applied Catalysis A: General</i> , 2018 , 567, 73-79	5.1	47
375	Heterojunction Based on Rh-Decorated WO ₃ Nanorods for Morphological Change and Gas Sensor Application Using the Transition Effect. <i>Chemistry of Materials</i> , 2019 , 31, 207-215	9.6	46
374	Extended Metal-Organic Frameworks on Diverse Supports as Electrode Nanomaterials for Electrochemical Energy Storage. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3964-3990	5.6	46
373	Mechanism for Ohmic contact formation of Ti on n-type GaN investigated using synchrotron radiation photoemission spectroscopy. <i>Journal of Applied Physics</i> , 2002 , 91, 9214-9217	2.5	45
372	Covalent Organic Frameworks: Emerging Organic Solid Materials for Energy and Electrochemical Applications. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27821-27852	9.5	44
371	Non-volatile control of 2DEG conductivity at oxide interfaces. <i>Advanced Materials</i> , 2013 , 25, 4612-7	24	44
370	Low-resistance Ti/Al ohmic contact on undoped ZnO. <i>Journal of Electronic Materials</i> , 2002 , 31, 868-871	1.9	43
369	Charge-transfer complexes for high-power organic rechargeable batteries. <i>Energy Storage Materials</i> , 2019 , 20, 462-469	19.4	42
368	Effect of Crystallization Modes in TIPS-pentacene/Insulating Polymer Blends on the Gas Sensing Properties of Organic Field-Effect Transistors. <i>Scientific Reports</i> , 2019 , 9, 21	4.9	41
367	+Iron hexacyanocobaltate metal-organic framework: Highly reversible and stationary electrode material with rich borders for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019 , 791, 911-917	5.7	41
366	Electrocatalytic Water Splitting and CO ₂ Reduction: Sustainable Solutions via Single-Atom Catalysts Supported on 2D Materials. <i>Small Methods</i> , 2019 , 3, 1800492	12.8	41
365	A wafer-scale antireflective protection layer of solution-processed TiO ₂ nanorods for high performance silicon-based water splitting photocathodes. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 9477-9485	13.4	41
364	Enhanced Photocatalytic Performance Depending on Morphology of Bismuth Vanadate Thin Film Synthesized by Pulsed Laser Deposition. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 505-512	9.5	40
363	Nanomaterials modified electrodes for electrochemical detection of Sudan I in food. <i>Journal of Food Measurement and Characterization</i> , 2021 , 15, 3837-3852	2.8	40
362	Chemical Sensors Based on Two-Dimensional (2D) Materials for Selective Detection of Ions and Molecules in Liquid. <i>Frontiers in Chemistry</i> , 2019 , 7, 708	5	40
361	Dual-Phase All-Inorganic Cesium Halide Perovskites for Conducting-Bridge Memory-Based Artificial Synapses. <i>Advanced Functional Materials</i> , 2019 , 29, 1906686	15.6	39
360	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 33835-33843	9.5	39

359	Tunneling vs. giant magnetoresistance in organic spin valve. <i>Synthetic Metals</i> , 2010 , 160, 216-222	3.6	39
358	P-type conductivity in bulk Al _x Ga _{1-x} N and Al _x Ga _{1-x} N/Al _y Ga _{1-y} N superlattices with average Al mole fraction >20%. <i>Applied Physics Letters</i> , 2004 , 84, 3310-3312	3.4	39
357	Au decoration of a graphene microchannel for self-activated chemoresistive flexible gas sensors with substantially enhanced response to hydrogen. <i>Nanoscale</i> , 2019 , 11, 2966-2973	7.7	38
356	Effect of an indium-tin-oxide overlayer on transparent Ni/Au ohmic contact on p-type GaN. <i>Applied Physics Letters</i> , 2003 , 82, 61-63	3.4	38
355	Direct synthesis of two-dimensional MoS ₂ on p-type Si and application to solar hydrogen production. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	37
354	Chiroptical-Conjugated Polymer/Chiral Small Molecule Hybrid Thin Films for Circularly Polarized Light-Detecting Heterojunction Devices. <i>Advanced Functional Materials</i> , 2019 , 29, 1808668	15.6	37
353	All-Solution-Processed WO ₃ /BiVO ₄ Core-Shell Nanorod Arrays for Highly Stable Photoanodes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 20004-20012	9.5	37
352	Quasi-2D halide perovskites for resistive switching devices with ON/OFF ratios above 10 ⁹ . <i>NPG Asia Materials</i> , 2020 , 12,	10.3	37
351	Embossed TiO ₂ Thin Films with Tailored Links between Hollow Hemispheres: Synthesis and Gas-Sensing Properties. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 9993-9999	3.8	37
350	Monolayer Co ₃ O ₄ Inverse Opals as Multifunctional Sensors for Volatile Organic Compounds. <i>Chemistry - A European Journal</i> , 2016 , 22, 7102-7	4.8	37
349	Mechanism of two-dimensional electron gas formation in Al _x Ga _{1-x} N/GaN heterostructures. <i>Applied Physics Letters</i> , 2002 , 81, 1249-1251	3.4	35
348	A screen printed electrode modified with FeO@polypyrrole-Pt core-shell nanoparticles for electrochemical detection of 6-mercaptopurine and 6-thioguanine. <i>Talanta</i> , 2021 , 232, 122379	6.2	35
347	Vertically ordered SnO ₂ nanobamboos for substantially improved detection of volatile reducing gases. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 17939-17945	13	34
346	Thermally stable Ir Schottky contact on AlGa _N /Ga _N heterostructure. <i>Applied Physics Letters</i> , 2003 , 82, 391-393	3.4	34
345	Boosting Aerobic Oxidation of Alcohols via Synergistic Effect between TEMPO and a Composite FeO/Cu-BDC/GO Nanocatalyst. <i>ACS Omega</i> , 2020 , 5, 5182-5191	3.9	33
344	Dominance of Plasmonic Resonant Energy Transfer over Direct Electron Transfer in Substantially Enhanced Water Oxidation Activity of BiVO ₄ by Shape-Controlled Au Nanoparticles. <i>Small</i> , 2017 , 13, 1701644	11.4	33
343	Template-engineered epitaxial BiVO ₄ photoanodes for efficient solar water splitting. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18831-18838	13	33
342	Facile synthesis of WS ₂ hollow spheres and their hydrogen evolution reaction performance. <i>Applied Surface Science</i> , 2020 , 505, 144574	6.7	33

341	Synergetically Selective Toluene Sensing in Hematite-Decorated Nickel Oxide Nanocorals. <i>Advanced Materials Technologies</i> , 2017 , 2, 1600259	6.8	32
340	Facile Solution Synthesis of Tungsten Trioxide Doped with Nanocrystalline Molybdenum Trioxide for Electrochromic Devices. <i>Scientific Reports</i> , 2017 , 7, 13258	4.9	32
339	Developments and applications of nanomaterial-based carbon paste electrodes.. <i>RSC Advances</i> , 2020 , 10, 21561-21581	3.7	32
338	Effects of Grain Boundary Density on the Gas Sensing Properties of Triethylsilylethynyl-Anthradithiophene Field-Effect Transistors. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701399	4.6	32
337	Nanogap-controlled Pd coating for hydrogen sensitive switches and hydrogen sensors. <i>Sensors and Actuators B: Chemical</i> , 2018 , 255, 1841-1848	8.5	32
336	Transparent Ohmic contacts of oxidized Ru and Ir on p-type GaN. <i>Journal of Applied Physics</i> , 2003 , 93, 5416-5421	2.5	32
335	Low-resistant and high-transparent Ru/Ni ohmic contact on p-type GaN. <i>Applied Physics Letters</i> , 2002 , 80, 2937-2939	3.4	32
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