

Sungwook Mhin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/246679/publications.pdf>

Version: 2024-02-01

64
papers

1,717
citations

331670

21
h-index

289244

40
g-index

66
all docs

66
docs citations

66
times ranked

2358
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of plasma oxynitriding temperature on wear and corrosion resistance of the AISI 4140 steel. <i>International Journal of Applied Ceramic Technology</i> , 2023, 20, 1002-1009.	2.1	1
2	A high-performance PDMS-based triboelectric nanogenerator fabricated using surface-modified carbon nanotubes via pulsed laser ablation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1299-1308.	10.3	32
3	Ti/TiO ₂ /SiO ₂ multilayer thin films with enhanced spectral selectivity for optical narrow bandpass filters. <i>Scientific Reports</i> , 2022, 12, 32.	3.3	14
4	Hierarchical core-shell Ni-Co-Cu-Pd alloys for efficient formic acid oxidation reaction with high mass activity. <i>Applied Surface Science</i> , 2022, 585, 152694.	6.1	3
5	CoFeS ₂ @CoS ₂ Nanocubes Entangled with CNT for Efficient Bifunctional Performance for Oxygen Evolution and Oxygen Reduction Reactions. <i>Nanomaterials</i> , 2022, 12, 983.	4.1	9
6	Computational atomic-scale design and experimental verification for layered double hydroxide as an efficient alkaline oxygen evolution reaction catalyst. <i>International Journal of Energy Research</i> , 2022, 46, 11972-11988.	4.5	6
7	NiFe Layered Double Hydroxide Electrocatalysts for an Efficient Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2022, 5, 8592-8600.	5.1	23
8	Effect of Cu/Fe addition on the microstructures and electrical performances of Ni-Co-Mn oxides. <i>Journal of Alloys and Compounds</i> , 2021, 859, 157769.	5.5	13
9	Pulsed Laser Confinement of Single Atomic Catalysts on Carbon Nanotube Matrix for Enhanced Oxygen Evolution Reaction. <i>ACS Nano</i> , 2021, 15, 4416-4428.	14.6	29
10	Electrochemical performance of the spinel NiCo ₂ O ₄ based nanostructure synthesized by chemical bath method for glucose detection. <i>Applied Surface Science</i> , 2021, 545, 148927.	6.1	12
11	Ni-Fe-Cu layered double hydroxides as high-performance electrocatalysts for alkaline water oxidation. <i>International Journal of Energy Research</i> , 2021, 45, 15312-15322.	4.5	13
12	Ni-doped carbon nanotubes fabricated by pulsed laser ablation in liquid as efficient electrocatalysts for oxygen evolution reaction. <i>Applied Surface Science</i> , 2021, 547, 149197.	6.1	17
13	Sulfur-incorporated nickel-iron layered double hydroxides for effective oxygen evolution reaction in seawater. <i>Applied Surface Science</i> , 2021, 568, 150965.	6.1	34
14	Synthesis of NiCo ₂ O ₄ Nanostructures and Their Electrochemical Properties for Glucose Detection. <i>Nanomaterials</i> , 2021, 11, 55.	4.1	17
15	Stabilizing oxygen intermediates on redox-flexible active sites in multimetallic Ni-Fe-Al-Co layered double hydroxide anodes for excellent alkaline and seawater electrolysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 27332-27346.	10.3	33
16	Residual neural network-based fully convolutional network for microstructure segmentation. <i>Science and Technology of Welding and Joining</i> , 2020, 25, 282-289.	3.1	23
17	Dual-Phase Engineering of Nickel Boride-Hydroxide Nanoparticles toward High-Performance Water Oxidation Electrocatalysts. <i>Advanced Functional Materials</i> , 2020, 30, 2004330.	14.9	44
18	Graphene Quantum Dots: Fundamental Understanding of the Formation Mechanism for Graphene Quantum Dots Fabricated by Pulsed Laser Fragmentation in Liquid: Experimental and Theoretical Insight (Small 38/2020). <i>Small</i> , 2020, 16, 2070210.	10.0	0

#	ARTICLE	IF	CITATIONS
19	Fundamental Understanding of the Formation Mechanism for Graphene Quantum Dots Fabricated by Pulsed Laser Fragmentation in Liquid: Experimental and Theoretical Insight. <i>Small</i> , 2020, 16, 2003538.	10.0	13
20	Boosting oxygen evolution reaction of transition metal layered double hydroxide by metalloid incorporation. <i>Nano Energy</i> , 2020, 75, 104945.	16.0	47
21	Stable and High-Energy-Density Zn-Ion Rechargeable Batteries Based on a MoS ₂ -Coated Zn Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27249-27257.	8.0	110
22	Crystal structures and electrical properties of cobalt manganese spinel oxides. <i>Materials Today Communications</i> , 2020, 25, 101298.	1.9	3
23	Synthesis of rod-type Co _{2.4} Mn _{0.6} O ₄ via oxalate precipitation for water splitting catalysts. <i>Applied Surface Science</i> , 2020, 510, 145390.	6.1	12
24	Oxygen Evolution Reaction of Co-Mn-O Electrocatalyst Prepared by Solution Combustion Synthesis. <i>Catalysts</i> , 2019, 9, 564.	3.5	13
25	Electrochemically activated cobalt nickel sulfide for an efficient oxygen evolution reaction: partial amorphization and phase control. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3592-3602.	10.3	81
26	Polarized Electronic Configuration in Transition Metal Fluoride Oxide Hollow Nanoprism for Highly Efficient and Robust Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 3999-4007.	5.1	24
27	Advantageous crystalline-amorphous phase boundary for enhanced electrochemical water oxidation. <i>Energy and Environmental Science</i> , 2019, 12, 2443-2454.	30.8	315
28	Graphene Oxide Quantum Dots Derived from Coal for Bioimaging: Facile and Green Approach. <i>Scientific Reports</i> , 2019, 9, 4101.	3.3	57
29	Electronically Double-Layered Metal Boride Hollow Nanoprism as an Excellent and Robust Water Oxidation Electrocatalysts. <i>Advanced Energy Materials</i> , 2019, 9, 1803799.	19.5	74
30	Room Temperature Bonding on Interface Between Metal and Ceramic. <i>Journal of Electronic Materials</i> , 2019, 48, 72-78.	2.2	4
31	Facile Design of Conductive Ag-PDMS Electrodes for Stretchable Electrodes. <i>Journal of Electronic Materials</i> , 2019, 48, 79-84.	2.2	8
32	Parallelized Reaction Pathway and Stronger Internal Band Bending by Partial Oxidation of Metal Sulfide-Graphene Composites: Important Factors of Synergistic Oxygen Evolution Reaction Enhancement. <i>ACS Catalysis</i> , 2018, 8, 4091-4102.	11.2	116
33	The effect of pH control on synthesis of Sr doped barium titanate nanopowder by oxalate precipitation method. <i>Ceramics International</i> , 2018, 44, 1420-1424.	4.8	16
34	Effect of Fe incorporation on cation distributions and hopping conduction in Ni-Mn-Co-O spinel oxides. <i>Journal of Alloys and Compounds</i> , 2018, 732, 486-490.	5.5	39
35	Synthesis of transition metal sulfide and reduced graphene oxide hybrids as efficient electrocatalysts for oxygen evolution reactions. <i>Royal Society Open Science</i> , 2018, 5, 180927.	2.4	14
36	Fe doped Ni-Mn-Co-O ceramics with varying Fe content as negative temperature coefficient sensors. <i>Ceramics International</i> , 2017, 43, 10528-10532.	4.8	25

#	ARTICLE	IF	CITATIONS
37	Few-layered metallic $1T\text{-MoS}_2/\text{TiO}_2$ with exposed (001) facets: two-dimensional nanocomposites for enhanced photocatalytic activities. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28207-28215.	2.8	28
38	Thermally-driven unequal cation vacancy formation and its effect on the dielectric properties in $\text{K}_0.5\text{Na}_0.5\text{NbO}_3$ ceramics. <i>Journal of the Korean Physical Society</i> , 2017, 71, 979-985.	0.7	2
39	Hopping conduction in $(\text{Ni,Co,Mn})\text{O}_4$ prepared by different synthetic routes: Conventional and spark plasma sintering. <i>Ceramics International</i> , 2017, 43, 16070-16075.	4.8	8
40	Effect of Surface Activated Bonding on Adhesion Strength Between Al and Al_2O_3 . <i>Nanoscience and Nanotechnology Letters</i> , 2017, 9, 1217-1221.	0.4	0
41	Crystal Structure of $\text{Lu}_{2.92}\text{Ce}_{0.08}\text{MgAl}_3\text{SiO}_{12}$ Garnet Phosphor and Its Photoluminescent Properties. <i>International Journal of Applied Ceramic Technology</i> , 2016, 13, 228-233.	2.1	0
42	Ultrafast Method for Selective Design of Graphene Quantum Dots with Highly Efficient Blue Emission. <i>Scientific Reports</i> , 2016, 6, 38423.	3.3	45
43	Stress-induced trench narrowing in Cu interconnect of sub-20 nm node: FEM simulation. <i>Materials Science in Semiconductor Processing</i> , 2016, 56, 100-105.	4.0	0
44	Synthesis of $\text{Co}_x\text{Mn}_{1-x}\text{O}_4$ (0.9 x 2.3). <i>Journal of Physical Chemistry C</i> , 2016, 120, 13667-13674.	4.8	5
45	with controlled phase and composition via a gel-combustion method. <i>Ceramics International</i> , 2016, 42, Effect of High Cobalt Concentration on Hopping Motion in Cobalt Manganese Spinel Oxide ($\text{Co}_x\text{Mn}_{3-x}\text{O}_4$, $x \approx 2.3$). <i>Journal of Physical Chemistry C</i> , 2016, 120, 13667-13674.	3.1	33
46	Synthesis of $(\text{Ni,Mn,Co})\text{O}_4$ nanopowder with single cubic spinel phase via combustion method. <i>Ceramics International</i> , 2016, 42, 13654-13658.	4.8	18
47	Analysis of structural effect on mechanical stress at backside deep trench isolation using finite element method. <i>Microelectronic Engineering</i> , 2016, 154, 42-47.	2.4	5
48	Phase evolution of $(\text{Ni, Co, Mn})\text{O}_4$ during heat treatment with high temperature in situ X-ray diffraction. <i>Ceramics International</i> , 2016, 42, 5412-5417.	4.8	11
49	Pulsed laser assisted synthesis of $\text{Ho}^{3+}/\text{Yb}^{3+}$ codoped CaMoO_4 nanocolloid and its upconversion luminescence. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, .	1.2	3
50	Combined Experimental and Computational Methods Reveal the Evolution of Buried Interfaces during Synthesis of Ferroelectric Thin Films. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500181.	3.7	16
51	Quasi-intrinsic colossal permittivity in Nb and In co-doped rutile TiO_2 nanoceramics synthesized through a oxalate chemical-solution route combined with spark plasma sintering. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 16864-16875.	2.8	51
52	Role of the PbTiO_3 Seed Layer on the Crystallization Behavior of PZT Thin Films. <i>Journal of the American Ceramic Society</i> , 2015, 98, 1407-1412.	3.8	7
53	The effects of oxygen pressure on disordering and magneto-transport properties of $\text{Ba}_2\text{FeMoO}_6$ thin films grown via pulsed laser deposition. <i>Journal of Applied Physics</i> , 2015, 118, 033903.	2.5	4
54	Crystal structure of Mn-Co-Ni thermistor. <i>Journal of the Korean Crystal Growth and Crystal Technology</i> , 2015, 25, 225-229.	0.3	0

#	ARTICLE	IF	CITATIONS
55	Phase and Texture Evolution in Chemically Derived PZT Thin Films on Pt Substrates. Journal of the American Ceramic Society, 2014, 97, 2973-2979.	3.8	8
56	Effect of Switching Atmospheric Conditions during Crystallization on the Phase Evolution of Solution-Derived Lead Zirconate Titanate Thin Films. Journal of the American Ceramic Society, 2013, 96, 2706-2709.	3.8	7
57	Phase and texture evolution in solution deposited lead zirconate titanate thin films: Formation and role of the Pt_3Pb intermetallic phase. Journal of Applied Physics, 2013, 113, .	2.5	20
58	Magnetic and magnetotransport properties of $\text{Ba}_2\text{FeMoO}_6$ pulsed laser deposited thin films. Journal of Applied Physics, 2012, 112, .	2.5	9
59	<i>In situ</i> x-ray diffraction of solution-derived ferroelectric thin films for quantitative phase and texture evolution measurement. Journal of Applied Physics, 2012, 112, .	2.5	14
60	Controllable white upconversion luminescence in $\text{Ho}^{3+}/\text{Tm}^{3+}/\text{Yb}^{3+}$ co-doped CaMoO_4 . Journal of Materials Chemistry, 2012, 22, 3997.	6.7	61
61	Simple synthetic route for hydroxyapatite colloidal nanoparticles via a Nd:YAG laser ablation in liquid medium. Applied Physics A: Materials Science and Processing, 2009, 96, 435-440.	2.3	21
62	Simple Route for $\text{Y}_3\text{Al}_5\text{O}_{12}:\text{Ce}^{3+}$ Colloidal Nanocrystal via Laser Ablation in Deionized Water and its Luminescence. Electrochemical and Solid-State Letters, 2008, 11, J23.	2.2	23
63	Luminescence of Nanocrystalline $\text{Tb}_3\text{Al}_5\text{O}_{12}:\text{Ce}^{3+}$ Phosphors Synthesized by Nitrate-Citrate Gel Combustion Method. Journal of the Electrochemical Society, 2008, 155, J293.	2.9	19
64	Room-temperature ferromagnetic organic magnets derived from fluoro-graphite via facile halide exchange. International Journal of Applied Ceramic Technology, 0, , .	2.1	1