

Hyuksu Han

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11719676/publications.pdf>

Version: 2024-02-01

49
papers

2,429
citations

186265
28
h-index

206112
48
g-index

49
all docs

49
docs citations

49
times ranked

3198
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Advantageous crystalline–amorphous phase boundary for enhanced electrochemical water oxidation. <i>Energy and Environmental Science</i> , 2019, 12, 2443-2454. | 30.8 | 315 |
| 2 | Promoting electrocatalytic overall water splitting with nanohybrid of transition metal nitride-oxynitride. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 521-527. | 20.2 | 197 |
| 3 | Domain Wall Displacement is the Origin of Superior Permittivity and Piezoelectricity in BaTiO ₃ at Intermediate Grain Sizes. <i>Advanced Functional Materials</i> , 2014, 24, 885-896. | 14.9 | 164 |
| 4 | Amorphous Nickel–Iron Borophosphate for a Robust and Efficient Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2021, 11, 2100624. | 19.5 | 120 |
| 5 | 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 |
| 6 | Origin of colossal permittivity in BaTiO ₃ via broadband dielectric spectroscopy. <i>Journal of Applied Physics</i> , 2013, 113, . | 2.5 | 86 |
| 7 | 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 |
| 8 | Variable Range Hopping Conduction in BaTiO ₃ Ceramics Exhibiting Colossal Permittivity. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9137-9142. | 3.1 | 79 |
| 9 | Chemical and structural engineering of transition metal boride towards excellent and sustainable hydrogen evolution reaction. <i>Nano Energy</i> , 2020, 67, 104245. | 16.0 | 79 |
| 10 | 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 |
| 11 | Defect Engineering of Bi ₂ Te ₃ Single Crystals: Enhanced Electrical and Radiation Performance for Room Temperature Gamma-Ray Detection. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3244-3250. | 3.1 | 72 |
| 12 | Graphene Oxide Quantum Dots Derived from Coal for Bioimaging: Facile and Green Approach. <i>Scientific Reports</i> , 2019, 9, 4101. | 3.3 | 57 |
| 13 | An Intriguing Pea-Like Nanostructure of Cobalt Phosphide on Molybdenum Carbide Incorporated Nitrogen-Doped Carbon Nanosheets for Efficient Electrochemical Water Splitting. <i>ChemSusChem</i> , 2018, 11, 3956-3964. | 6.8 | 55 |
| 14 | 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 |
| 15 | Atomic Layer Deposition-Assisted Fabrication of Co-Nanoparticle/N-Doped Carbon Nanotube Hybrids as Efficient Electrocatalysts for the Oxygen Evolution Reaction. <i>Small</i> , 2020, 16, e2002427. | 10.0 | 51 |
| 16 | Current Status of Self-Supported Catalysts for Robust and Efficient Water Splitting for Commercial Electrolyzer. <i>ChemCatChem</i> , 2019, 11, 5898-5912. | 3.7 | 47 |
| 17 | Boosting oxygen evolution reaction of transition metal layered double hydroxide by metalloid incorporation. <i>Nano Energy</i> , 2020, 75, 104945. | 16.0 | 47 |
| 18 | Dielectric relaxation and localized electron hopping in colossal dielectric (Nb,In)-doped TiO ₂ rutile nanoceramics. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8568-8574. | 2.8 | 46 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Ultrafast Method for Selective Design of Graphene Quantum Dots with Highly Efficient Blue Emission. <i>Scientific Reports</i> , 2016, 6, 38423. | 3.3 | 45 |
| 20 | Synthesis of BaTiO_3 -20wt% CoFeO_2 Nanocomposites via Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2504-2509. | 3.8 | 44 |
| 21 | 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 |
| 22 | Simultaneous electrical and defect engineering of nickel iron metal-organic-framework via co-doping of metalloid and non-metal elements for a highly efficient oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2022, 439, 135720. | 12.7 | 41 |
| 23 | Colossal Permittivity in Microwave-Sintered Barium Titanate and Effect of Annealing on Dielectric Properties. <i>Journal of the American Ceramic Society</i> , 2013, 96, 485-490. | 3.8 | 39 |
| 24 | 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 |
| 25 | 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 |
| 26 | 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 |
| 27 | Laser wavelength modulated pulsed laser ablation for selective and efficient production of graphene quantum dots. <i>RSC Advances</i> , 2019, 9, 13658-13663. | 3.6 | 30 |
| 28 | Self-templated Prussian blue analogue for efficient and robust electrochemical water oxidation. <i>Journal of Catalysis</i> , 2019, 369, 168-174. | 6.2 | 30 |
| 29 | Influence of Oxygen Substoichiometry on the Dielectric Properties of BaTiO_3 Nanoceramics Obtained by Spark Plasma Sintering. <i>International Journal of Applied Ceramic Technology</i> , 2013, 10, E122. | 2.1 | 29 |
| 30 | 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 |
| 31 | Colossal permittivity and low losses in $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$ reduced nanoceramics. <i>Journal of the European Ceramic Society</i> , 2016, 36, 567-575. | 5.7 | 27 |
| 32 | 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 |
| 33 | Self-supported vanadium-incorporated cobalt phosphide as a highly efficient bifunctional electrocatalyst for water splitting. <i>Journal of Alloys and Compounds</i> , 2020, 846, 156350. | 5.5 | 23 |
| 34 | High-power energy harvesting and imperceptible pulse sensing through peapod-inspired hierarchically designed piezoelectric nanofibers. <i>Nano Energy</i> , 2022, 99, 107386. | 16.0 | 20 |
| 35 | 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 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Engineering [Fe(CN) ₆] ³⁻ vacancy via free-chelating agents in Prussian blue analogues on reduced graphene oxide for efficient oxygen evolution reaction. <i>Applied Surface Science</i> , 2022, 574, 151620. | 6.1 | 15 |
| 38 | 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 |
| 39 | Facile Synthesis of N-Doped WS ₂ Nanosheets as an Efficient and Stable Electrocatalyst for Hydrogen Evolution Reaction in Acidic Media. <i>Catalysts</i> , 2020, 10, 1238. | 3.5 | 13 |
| 40 | 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 |
| 41 | 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 |
| 42 | Internal barrier layer capacitor, nearest neighbor hopping, and variable range hopping conduction in Ba _{1-x} Sr _x TiO ₃ nanoceramics. <i>Journal of Materials Science</i> , 2016, 51, 7440-7450. | 3.7 | 11 |
| 43 | Study of multi-faceted CoS ₂ introduced graphene aerogel hybrids via chemical approach for an effective electrocatalytic water splitting. <i>Current Applied Physics</i> , 2021, 32, 78-85. | 2.4 | 11 |
| 44 | 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 |
| 45 | Hopping conduction in (Ni,Co,Mn)O ₄ prepared by different synthetic routes: Conventional and spark plasma sintering. <i>Ceramics International</i> , 2017, 43, 16070-16075. | 4.8 | 8 |
| 46 | Fabrication and testing of antimony doped bismuth tri-iodide semiconductor gamma-ray detectors. <i>Radiation Measurements</i> , 2016, 91, 1-8. | 1.4 | 7 |
| 47 | 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 |
| 48 | Enhanced photoelectrochemical characteristic of TiO ₂ nanotubes via surface plasma treatment. <i>Ceramics International</i> , 2021, 47, 30741-30746. | 4.8 | 5 |
| 49 | In-situ formation of an efficient trimetallic (<sc>Cu</sc>)₂(<sc>Zn</sc>)₂(<sc>Ag</sc>) electrocatalyst for water oxidation. <i>International Journal of Energy Research</i> , 2021, 45, 2931-2944. | 4.5 | 4 |