# Yusuke Yamada

List of Publications by Year
in descending order



| 90 | 4,325 | 136885 | 110317 |
|---|---|---|---|
| papers | citations | 32 h-index | 64 g-index |

| 93 | 93 | 93 | 4516 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Seawater usable for production and consumption of hydrogen peroxide as a solar fuel. Nature Communications, 2016, 7, 11470. | 5.8 | 310 |
| 2 | Hydrogen peroxide as a sustainable energy carrier: Electrocatalytic production of hydrogen peroxide and the fuel cell. Electrochimica Acta, 2012, 82, 493-511. | 2.6 | 245 |
| 3 | Catalysis of Nickel Ferrite for Photocatalytic Water Oxidation Using [Ru(bpy)<sub>3</sub>]<sup>2+</sup>and S<sub>2</sub>O<sub>8</sub><sup>2â€“</sup>. Journal of the American Chemical Society, 2012, 134, 19572-19575. | 6.6 | 243 |
| 4 | Water-soluble mononuclear cobalt complexes with organic ligands acting as precatalysts for efficient photocatalytic water oxidation. Energy and Environmental Science, 2012, 5, 7606. | 15.6 | 208 |
| 5 | Cu/Co<sub>3</sub>O<sub>4</sub> Nanoparticles as Catalysts for Hydrogen Evolution from Ammonia Borane by Hydrolysis. Journal of Physical Chemistry C, 2010, 114, 16456-16462. | 1.5 | 191 |
| 6 | Catalytic mechanisms of hydrogen evolution with homogeneous and heterogeneous catalysts. Energy and Environmental Science, 2011, 4, 2754. | 15.6 | 169 |
| 7 | Water Oxidation Catalysis with Nonheme Iron Complexes under Acidic and Basic Conditions: Homogeneous or Heterogeneous?. Inorganic Chemistry, 2013, 52, 9522-9531. | 1.9 | 164 |
| 8 | Efficient water oxidation by cerium ammonium nitrate with [Ir<sup>III</sup>(Cp*)(4,4â€²-bishydroxy-2,2â€²-bipyridine)(H<sub>2</sub>O)]<sup>2+</sup>as a precatalyst. Energy and Environmental Science, 2012, 5, 5708-5716. | 15.6 | 145 |
| 9 | Hydrogen peroxide as sustainable fuel: electrocatalysts for production with a solar cell and decomposition with a fuel cell. Chemical Communications, 2010, 46, 7334. | 2.2 | 135 |
| 10 | Protonated ironâ€“phthalocyanine complex used for cathode material of a hydrogen peroxide fuel cell operated under acidic conditions. Energy and Environmental Science, 2011, 4, 2822. | 15.6 | 131 |
| 11 | High and robust performance of H<sub>2</sub>O<sub>2</sub> fuel cells in the presence of scandium ion. Energy and Environmental Science, 2015, 8, 1698-1701. | 15.6 | 112 |
| 12 | LaCoO3 acting as an efficient and robust catalyst for photocatalytic water oxidation with persulfate. Physical Chemistry Chemical Physics, 2012, 14, 5753. | 1.3 | 109 |
| 13 | Photocatalytic Hydrogen Evolution under Highly Basic Conditions by Using Ru Nanoparticles and 2-Phenyl-4-(1-naphthyl)quinolinium Ion. Journal of the American Chemical Society, 2011, 133, 16136-16145. | 6.6 | 98 |
| 14 | Efficient Photocatalytic Production of Hydrogen Peroxide from Water and Dioxygen with Bismuth Vanadate and a Cobalt(II) Chlorin Complex. ACS Energy Letters, 2016, 1, 913-919. | 8.8 | 98 |
| 15 | Sizeâ€and Shapeâ€Dependent Activity of Metal Nanoparticles as Hydrogenâ€Evolution Catalysts: Mechanistic Insights into Photocatalytic Hydrogen Evolution. Chemistry - A European Journal, 2011, 17, 2777-2785. | 1.7 | 97 |
| 16 | Photocatalytic hydrogen evolution with Ni nanoparticles by using 2-phenyl-4-(1-naphthyl)quinolinium ion as a photocatalyst. Energy and Environmental Science, 2012, 5, 6111. | 15.6 | 89 |
| 17 | Catalytic application of shape-controlled Cu<sub>2</sub>O particles protected by Co<sub>3</sub>O<sub>4</sub>nanoparticles for hydrogen evolution from ammonia borane. Energy and Environmental Science, 2012, 5, 5356-5363. | 15.6 | 88 |
| 18 | Hydrogen Peroxide used as a Solar Fuel in Oneâ€Compartment Fuel Cells. ChemElectroChem, 2016, 3, 1978-1989. | 1.7 | 84 |

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|---|---|---|---|
| 19 | A Robust Oneâ€Compartment Fuel Cell with a Polynuclear Cyanide Complex as a Cathode for Utilizing H<sub>2</sub>O<sub>2</sub> as a Sustainable Fuel at Ambient Conditions. Chemistry - A European Journal, 2013, 19, 11733-11741. | 1.7 | 80 |
| 20 | Bioinspired Photocatalytic Water Reduction and Oxidation with Earth-Abundant Metal Catalysts. Journal of Physical Chemistry Letters, 2013, 4, 3458-3467. | 2.1 | 77 |
| 21 | Catalytic activity of metal-based nanoparticles for photocatalytic water oxidation and reduction. Journal of Materials Chemistry, 2012, 22, 24284. | 6.7 | 69 |
| 22 | Bottom-up and top-down methods to improve catalytic reactivity for photocatalytic production of hydrogen peroxide using a Ru-complex and water oxidation catalysts. Journal of Materials Chemistry A, 2015, 3, 12404-12412. | 5.2 | 67 |
| 23 | Homogeneous and Heterogeneous Photocatalytic Water Oxidation by Persulfate. Chemistry - an Asian Journal, 2016, 11, 1138-1150. | 1.7 | 67 |
| 24 | Photocatalytic production of hydrogen peroxide from water and dioxygen using cyano-bridged polynuclear transition metal complexes as water oxidation catalysts. Catalysis Science and Technology, 2016, 6, 681-684. | 2.1 | 66 |
| 25 | High Catalytic Activity of Heteropolynuclear Cyanide Complexes Containing Cobalt and Platinum Ions: Visibleâ€Light Driven Water Oxidation. Angewandte Chemie - International Edition, 2015, 54, 5613-5617. | 7.2 | 63 |
| 26 | Enhanced catalytic activity of CuPd alloy nanoparticles towards reduction of nitroaromatics and hexavalent chromium. Journal of Colloid and Interface Science, 2017, 486, 46-57. | 5.0 | 60 |
| 27 | High Power Density of One-Compartment H<sub>2</sub>O<sub>2</sub> Fuel Cells Using Pyrazine-Bridged Fe[M<sup>C</sup>(CN)<sub>4</sub>] (M<sup>C</sup> = Pt<sup>2+</sup> and) Tj ETQq1 1 0.784314 rgBT /Ove | 1.9 | 56 |
| 28 | Shapeâ€•and Sizeâ€Controlled Nanomaterials for Artificial Photosynthesis. ChemSusChem, 2013, 6, 1834-1847. | 3.6 | 51 |
| 29 | Photocatalytic Hydroxylation of Benzene by Dioxygen to Phenol with a Cyano-Bridged Complex Containing Fe<sup>II</sup> and Ru<sup>II</sup> Incorporated in Mesoporous Silicaâ€“Alumina. Inorganic Chemistry, 2016, 55, 5780-5786. | 1.9 | 46 |
| 30 | Catalytic activity of NiMnO3 for visible light-driven and electrochemical water oxidation. Physical Chemistry Chemical Physics, 2013, 15, 19125. | 1.3 | 41 |
| 31 | Dual function photocatalysis of cyano-bridged heteronuclear metal complexes for water oxidation and two-electron reduction of dioxygen to produce hydrogen peroxide as a solar fuel. Chemical Communications, 2017, 53, 3473-3476. | 2.2 | 37 |
| 32 | Acetate Induced Enhancement of Photocatalytic Hydrogen Peroxide Production from Oxalic Acid and Dioxygen. Journal of Physical Chemistry A, 2013, 117, 3751-3760. | 1.1 | 33 |
| 33 | Photocatalytic hydrogen evolution from carbon-neutral oxalate with 2-phenyl-4-(1-naphthyl)quinolinium ion and metal nanoparticles. Physical Chemistry Chemical Physics, 2012, 14, 10564. | 1.3 | 32 |
| 34 | Thermal and Photocatalytic Production of Hydrogen Peroxide and its Use in Hydrogen Peroxide Fuel Cells. Australian Journal of Chemistry, 2014, 67, 354. | 0.5 | 32 |
| 35 | High dimensional stability of LiCoMnO4 as positive electrodes operating at high voltage for lithium-ion batteries with a long cycle life. Electrochimica Acta, 2018, 260, 498-503. | 2.6 | 32 |
| 36 | Photocatalytic production of hydrogen peroxide by two-electron reduction of dioxygen with carbon-neutral oxalate using a 2-phenyl-4-(1-naphthyl)quinolinium ion as a robust photocatalyst. Chemical Communications, 2012, 48, 8329. | 2.2 | 30 |

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|---|---|---|---|
| 37 | The long-lived electron transfer state of the 2-phenyl-4-(1-naphthyl)quinolinium ion incorporated into nanosized mesoporous silicaâ€“alumina acting as a robust photocatalyst in water. Chemical Communications, 2013, 49, 5132. | 2.2 | 30 |
| 38 | Selective hydroxylation of benzene derivatives and alkanes with hydrogen peroxide catalysed by a manganese complex incorporated into mesoporous silicaâ€“alumina. Chemical Communications, 2015, 51, 4662-4665. | 2.2 | 30 |
| 39 | Robustness of Ru/SiO<sub>2</sub> as a Hydrogen-Evolution Catalyst in a Photocatalytic System Using an Organic Photocatalyst. Journal of Physical Chemistry C, 2013, 117, 13143-13152. | 1.5 | 29 |
| 40 | Photocatalytic H2 evolution from NADH with carbon quantum dots/Pt and 2-phenyl-4-(1-naphthyl)quinolinium ion. Journal of Photochemistry and Photobiology B: Biology, 2015, 152, 63-70. | 1.7 | 28 |
| 41 | Sustainable metal nano-contacts showing quantized conductance prepared at a gap of thin metal wires in solution. Chemical Communications, 2001, , 2170-2171. | 2.2 | 27 |
| 42 | Production of hydrogen peroxide by combination of semiconductor-photocatalysed oxidation of water and photocatalytic two-electron reduction of dioxygen. RSC Advances, 2016, 6, 42041-42044. | 1.7 | 26 |
| 43 | Photocatalytic water oxidation by persulphate with a Ca<sup>2+</sup> ion-incorporated polymeric cobalt cyanide complex affording O<sub>2</sub> with 200% quantum efficiency. Chemical Communications, 2017, 53, 3418-3421. | 2.2 | 26 |
| 44 | Impact of particle size of lithium manganese oxide on charge transfer resistance and contact resistance evaluated by electrochemical impedance analysis. Electrochimica Acta, 2020, 364, 137292. | 2.6 | 26 |
| 45 | Elucidating the Role of Oxideâ€“Oxide/Carbon Interfaces of CuO<sub>x</sub>â€“CeO<sub>2</sub>/C in Boosting Electrocatalytic Performance. Langmuir, 2020, 36, 15141-15152. | 1.6 | 25 |
| 46 | Heterogeneous catalase-like activity of gold(<scp>i</scp>)â€“cobalt(<scp>iii</scp>) metallosupramolecular ionic crystals. Chemical Science, 2017, 8, 2671-2676. | 3.7 | 22 |
| 47 | Synergistic effects of Ni and Cu supported on TiO2 and SiO2 on photocatalytic H2 evolution with an electron donorâ€“acceptor linked molecule. Catalysis Science and Technology, 2015, 5, 979-988. | 2.1 | 19 |
| 48 | Photocatalytic hydrogen evolution systems constructed in cross-linked porous protein crystals. Applied Catalysis B: Environmental, 2018, 237, 1124-1129. | 10.8 | 19 |
| 49 | Li<sub>2</sub>Ni<sub>0.2</sub>Co<sub>1.8</sub>O<sub>4</sub> having a spinel framework as a zero-strain positive electrode material for lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 13641-13649. | 5.2 | 19 |
| 50 | Unravelling the Role of Metallic Cu in Cu-CuFe<sub>2</sub>O<sub>4</sub>/C Nanohybrid for Enhanced Oxygen Reduction Electrocatalysis. ACS Applied Energy Materials, 2020, 3, 3488-3496. | 2.5 | 19 |
| 51 | RuO<sub>2</sub> Nanoparticle-Embedded Graphitic Carbon Nitride for Efficient Photocatalytic H<sub>2</sub> Evolution. ACS Applied Nano Materials, 2021, 4, 11700-11708. | 2.4 | 17 |
| 52 | A composite photocatalyst of an organic electron donorâ€“acceptor dyad and a Pt catalyst supported on semiconductor nanosheets for efficient hydrogen evolution from oxalic acid. Catalysis Science and Technology, 2015, 5, 428-437. | 2.1 | 16 |
| 53 | A Clue to High Rate Capability of Lithium-Ion Batteries Obtained by an Electrochemical Approach Using â€œDilutedâ€•Electrode. Journal of the Electrochemical Society, 2018, 165, A3965-A3970. | 1.3 | 16 |
| 54 | Improvement of durability of an organic photocatalyst in p-xylene oxygenation by addition of a Cu(ii) complex. Physical Chemistry Chemical Physics, 2012, 14, 9654. | 1.3 | 15 |

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| 55 | Effect of surface acidity of cyano-bridged polynuclear metal complexes on the catalytic activity for the hydrolysis of organophosphates. Catalysis Science and Technology, 2018, 8, 4747-4756. | 2.1 | 15 |
| 56 | Hybrid H2-evolution catalysts: in situ formation of H2-evolution catalysts from metal salts inside the mesopores of silicaâ€“alumina supporting an organic photosensitiser. RSC Advances, 2013, 3, 25677. | 1.7 | 13 |
| 57 | Creation and stabilisation of tuneable open metal sites in thiocyanato-bridged heterometallic coordination polymers to be used as heterogeneous catalysts. Dalton Transactions, 2019, 48, 17063-17069. | 1.6 | 12 |
| 58 | Singleâ€Crystalâ€toâ€Singleâ€Crystal Installation of Ln 4 (OH) 4 Cubanes in an Anionic Metallosupramolecular Framework. Angewandte Chemie - International Edition, 2020, 59, 18048-18053. | 7.2 | 12 |
| 59 | Enhancing the electrocatalytic activity via hybridization of Cu(I/II) oxides with Co3O4 towards oxygen electrode reactions. Journal of Power Sources, 2021, 490, 229511. | 4.0 | 12 |
| 60 | Cobaltâ€Copper Nanoparticles Catalyzed Selective Oxidation Reactions: Efficient Catalysis at Room Temperature. ChemistrySelect, 2018, 3, 9826-9832. | 0.7 | 11 |
| 61 | Utilization of core-shell nanoparticles to evaluate subsurface contribution to water oxidation catalysis of [CoII(H2O)2]1.5[CoIII(CN)6] nanoparticles. Applied Catalysis B: Environmental, 2020, 262, 118101. | 10.8 | 11 |
| 62 | Niâ€“Cu alloy nanoparticles loaded on various metal oxides acting as efficient catalysts for photocatalytic H<sub>2</sub> evolution. RSC Advances, 2015, 5, 44912-44919. | 1.7 | 10 |
| 63 | Electrochemical impedance analysis of Li[Li0.1Al0.1Mn1.8]O4 used as lithium-insertion electrodes by the diluted electrode method. Journal of Power Sources, 2019, 435, 226810. | 4.0 | 10 |
| 64 | Measurement of Side-Reaction Currents on Electrodes of Lithium-Ion Cells Using a Battery Cycler with a High-Precision Current Source. Electrochemistry, 2019, 87, 188-192. | 0.6 | 10 |
| 65 | Excitation energy transfer from non-aggregated molecules to perylenediimide nanoribbons via ionic interactions in water. Journal of Materials Chemistry, 2012, 22, 12547. | 6.7 | 9 |
| 66 | Nanofabrication of a Solidâ€State, Mesoporous Nanoparticle Composite for Efficient Photocatalytic Hydrogen Generation. ChemPlusChem, 2016, 81, 521-525. | 1.3 | 9 |
| 67 | Unique Half Embedded/Exposed PdFeCu/C Interfacial Nanoalloy as Highâ€Performance Electrocatalyst for Oxygen Reduction Reaction. ChemCatChem, 2019, 11, 3522-3529. | 1.8 | 9 |
| 68 | Rate capability of carbon-free lithium titanium oxide electrodes related to formation of electronic conduction paths observed by color change. Journal of Power Sources, 2019, 430, 150-156. | 4.0 | 9 |
| 69 | Reaction Mechanism and Kinetic Analysis of the Solid-State Reaction to Synthesize Single-Phase Li2Co2O4 Spinel. Journal of Physical Chemistry C, 2020, 124, 8170-8177. | 1.5 | 9 |
| 70 | Nonprecious Hybrid Metal Oxide for Bifunctional Oxygen Electrodes: Endorsing the Role of Interfaces in Electrocatalytic Enhancement. Energy & Fuels, 2021, 35, 13370-13381. | 2.5 | 9 |
| 71 | Comparative Measurements of Side-Reaction Currents of Li[Li1/3Ti5/3]O4 and Li[Li0.1Al0.1Mn1.8]O4 Electrodes in Lithium-Ion Cells and Symmetric Cells. Journal of the Electrochemical Society, 2019, 166, A3314-A3318. | 1.3 | 8 |
| 72 | Relationship between changes in ionic radius and lattice dimension of lithium manganese oxide spinels during lithium insertion/extraction. Solid State Ionics, 2019, 343, 115077. | 1.3 | 8 |

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|---|---|---|---|
| 73 | Pd<sub>2</sub>CuCo/C Hybrid with Nanoflower Morphology toward Oxygen Reduction and Formic Acid Oxidation Reactions: Experimental and Computational Studies. Energy & Fuels, 2021, 35, 11515-11524. | 2.5 | 8 |
| 74 | Laser-induced pinpoint hydrogen evolution from benzene and water using metal free single-walled carbon nanotubes with high quantum yields. Chemical Science, 2015, 6, 666-674. | 3.7 | 7 |
| 75 | Elucidation of the origin of voltage hysteresis in xLi2MnO3â˜™(1â˜’x)LiCoO2 using backstitch charge-discharge method. Electrochimica Acta, 2020, 334, 135623. | 2.6 | 6 |
| 76 | Single Open Sites on Fe<sup>II</sup> Ions Stabilized by Coupled Metal Ions in CN-Deficient Prussian Blue Analogues for High Catalytic Activity in the Hydrolysis of Organophosphates. Inorganic Chemistry, 2020, 59, 16000-16009. | 1.9 | 6 |
| 77 | Effect of Electronic Conductivity on the Polarization Behavior of Li[Li1/3Ti5/3]O4 Electrodes. Journal of the Electrochemical Society, 2021, 168, 070555. | 1.3 | 5 |
| 78 | Quantitative Analysis of Large Voltage Hysteresis of Lithium Excess Materials by Backstitch Charge and Discharge Method. Journal of the Electrochemical Society, 2018, 165, A2675-A2681. | 1.3 | 4 |
| 79 | Efficient capturing of hydrogen peroxide in dilute aqueous solution by co-crystallization with amino acids. CrystEngComm, 2021, 23, 5456-5462. | 1.3 | 4 |
| 80 | Cobalt hexacyanoferrate as an effective cocatalyst boosting water oxidation on oxynitride TaON photocatalyst under visible light. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 426, 113753. | 2.0 | 4 |
| 81 | Electrocatalysts for Hydrogen Peroxide Reduction Used in Fuel Cells. Lecture Notes in Energy, 2018, , 141-168. | 0.2 | 3 |
| 82 | Mechanism for Catalytic Stability Enhancement of Fe<sup>III</sup>[Co<sup>III</sup>(CN)<sub>6</sub>] by Doping Divalent Ions for Organophosphate Hydrolysis. Journal of Physical Chemistry C, 2022, 126, 5564-5574. | 1.5 | 3 |
| 83 | Immobilization of Ir(OH)3 Nanoparticles in Mesospaces of Al-SiO2 Nanoparticles Assembly to Enhance Stability for Photocatalytic Water Oxidation. Catalysts, 2020, 10, 1015. | 1.6 | 2 |
| 84 | Voltage decay for lithium-excess material of Li[Li1/5Co2/5Mn2/5]O2 during cycling analyzed via backstitch method. Journal of Solid State Electrochemistry, 2022, 26, 1519-1526. | 1.2 | 2 |
| 85 | Enhanced catalytic stability of acid phosphatase immobilized in the mesospaces of a SiO2-nanoparticles assembly for catalytic hydrolysis of organophosphates. Molecular Catalysis, 2021, 510, 111669. | 1.0 | 1 |
| 86 | Synthesis Optimization of Electrochemically Active LiCoMnO<sub>4</sub> for High-Voltage Lithium-Ion Batteries. Energy & Fuels, 2021, 35, 13449-13456. | 2.5 | 1 |
| 87 | Heterogeneous Catalysis of Lanthanoid Ions for the Hydrolysis of p-Nitrophenyl Phosphate Enhanced by Incorporation to Cyano-Bridged Heterometallic Coordination Polymers. Journal of Physical Chemistry C, 2022, 126, 4365-4373. | 1.5 | 1 |
| 88 | Utilization of Polymeric Cyano-Bridged Metal Complexes as Heterogeneous Catalysts. Bulletin of Japan Society of Coordination Chemistry, 2016, 68, 16-28. | 0.1 | 0 |
| 89 | Singleâ€Crystalâ€toâ€Singleâ€Crystal Installation of Ln 4 (OH) 4 Cubanes in an Anionic Metallosupramolecular Framework. Angewandte Chemie, 2020, 132, 18204-18209. | 1.6 | 0 |
| 90 | Synthesis and electrochemical properties of a cubic polymorph of LiNi1/2Mn1/2O2 with a spinel framework. Journal of Solid State Electrochemistry, 2022, 26, 257. | 1.2 | 0 |