Peili Zhang

List of Publications by Citations

333 papers	28,031 citations	74 h-index	161 g-index
359 ext. papers	31,816 ext. citations	11.2 avg, IF	7.63 L-index

#	Paper	IF	Citations
333	Dye-sensitized solar cells. *Chemical Reviews*, **2010**, 110, 6595-663	68.1	7291
332	A molecular ruthenium catalyst with water-oxidation activity comparable to that of photosystem II. *Nature Chemistry*, **2012**, 4, 418-23	17.6	1001
331	Design of organic dyes and cobalt polypyridine redox mediators for high-efficiency dye-sensitized solar cells. *Journal of the American Chemical Society*, **2010**, 132, 16714-24	16.4	912
330	Nickel-vanadium monolayer double hydroxide for efficient electrochemical water oxidation. *Nature Communications*, **2016**, 7, 11981	17.4	635
329	Recent progress in electrochemical hydrogen production with earth-abundant metal complexes as catalysts. *Energy and Environmental Science*, **2012**, 5, 6763	35.4	426
328	Effect of Different Dye Baths and Dye-Structures on the Performance of Dye-Sensitized Solar Cells Based on Triphenylamine Dyes. *Journal of Physical Chemistry C*, **2008**, 112, 11023-11033	3.8	404
327	Isolated seven-coordinate Ru(IV) dimer complex with [HOHOH](-) bridging ligand as an intermediate for catalytic water oxidation. *Journal of the American Chemical Society*, **2009**, 131, 10397-9	16.4	403
326	Recent Progress on Hole-Transporting Materials for Emerging Organometal Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1500213	21.8	376
325	Artificial photosynthesis: opportunities and challenges of molecular catalysts. *Chemical Society Reviews*, **2019**, 48, 2216-2264	58.5	363
324	Design of an organic chromophore for p-type dye-sensitized solar cells. *Journal of the American Chemical Society*, **2008**, 130, 8570-1	16.4	344
323	Recent advances in dye-sensitized photoelectrochemical cells for solar hydrogen production based on molecular components. *Energy and Environmental Science*, **2015**, 8, 760-775	35.4	326
322	Carbazole-based hole-transport materials for efficient solid-state dye-sensitized solar cells and perovskite solar cells. *Advanced Materials*, **2014**, 26, 6629-34	24	320
321	A low-cost spiro[fluorene-9,9?-xanthene]-based hole transport material for highly efficient solid-state dye-sensitized solar cells and perovskite solar cells. *Energy and Environmental Science*, **2016**, 9, 873-877	35.4	306
320	Visible light driven water splitting in a molecular device with unprecedentedly high photocurrent density. *Journal of the American Chemical Society*, **2013**, 135, 4219-22	16.4	303
319	Organic Dye-Sensitized Tandem Photoelectrochemical Cell for Light Driven Total Water Splitting. *Journal of the American Chemical Society*, **2015**, 137, 9153-9	16.4	289
318	Effect of Tetrahydroquinoline Dyes Structure on the Performance of Organic Dye-Sensitized Solar Cells. *Chemistry of Materials*, **2007**, 19, 4007-4015	9.6	283
317	Dendritic core-shell nickel-iron-copper metal/metal oxide electrode for efficient electrocatalytic water oxidation. *Nature Communications*, **2018**, 9, 381	17.4	241

316	Highly efficient bioinspired molecular Ru water oxidation catalysts with negatively charged backbone ligands. *Accounts of Chemical Research*, **2015**, 48, 2084-96	24.3	223
315	Direct Observation of Structural Evolution of Metal Chalcogenide in Electrocatalytic Water Oxidation. *ACS Nano*, **2018**, 12, 12369-12379	16.7	220
314	Visible light driven hydrogen production from a photo-active cathode based on a molecular catalyst and organic dye-sensitized p-type nanostructured NiO. *Chemical Communications*, **2012**, 48, 988-90	5.8	217
313	A photoelectrochemical device for visible light driven water splitting by a molecular ruthenium catalyst assembled on dye-sensitized nanostructured TiO2. *Chemical Communications*, **2010**, 46, 7307-9	5.8	217
312	Structure engineering of hole-conductor free perovskite-based solar cells with low-temperature-processed commercial carbon paste as cathode. *ACS Applied Materials & Interfaces*, **2014**, 6, 16140-6	9.5	214
311	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. *Nano Energy*, **2016**, 23, 138-144	17.1	213
310	Boosting the efficiency and the stability of low cost perovskite solar cells by using CuPc nanorods as hole transport material and carbon as counter electrode. *Nano Energy*, **2016**, 20, 108-116	17.1	211
309	Visible light-driven water oxidation from molecular catalysts to photoelectrochemical cells. *Energy and Environmental Science*, **2011**, 4, 3296	35.4	198
308	Rational Design of Nanoarray Architectures for Electrocatalytic Water Splitting. *Advanced Functional Materials*, **2019**, 29, 1808367	15.6	186
307	13.6% Efficient Organic Dye-Sensitized Solar Cells by Minimizing Energy Losses of the Excited State. *ACS Energy Letters*, **2019**, 4, 943-951	20.1	183
306	Vertically Aligned Oxygenated-CoS2 MoS2 Heteronanosheet Architecture from Polyoxometalate for Efficient and Stable Overall Water Splitting. *ACS Catalysis*, **2018**, 8, 4612-4621	13.1	182
305	Tailor-Making Low-Cost Spiro[fluorene-9,9?-xanthene]-Based 3D Oligomers for Perovskite Solar Cells. *CheM*, **2017**, 2, 676-687	16.2	176
304	Effect of Anchoring Group on Electron Injection and Recombination Dynamics in Organic Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2009**, 113, 3881-3886	3.8	175
303	Efficient Electrocatalytic Water Oxidation by a Copper Oxide Thin Film in Borate Buffer. *ACS Catalysis*, **2015**, 5, 627-630	13.1	172
302	Highly Efficient Solid-State Dye-Sensitized Solar Cells Based on Triphenylamine Dyes. *Advanced Functional Materials*, **2011**, 21, 2944-2952	15.6	170
301	Promoting Active Sites in Core Shell Nanowire Array as Mott Schottky Electrocatalysts for Efficient and Stable Overall Water Splitting. *Advanced Functional Materials*, **2018**, 28, 1704447	15.6	165
300	Influence of Tertiary Phosphanes on the Coordination Configurations and Electrochemical Properties of Iron Hydrogenase Model Complexes: Crystal Structures of [(ES2C3H6)Fe2(CO)6 Ln] (L = PMe2Ph, n = 1, 2; PPh3, P(OEt)3, n = 1). *European Journal of Inorganic Chemistry*, **2005**, 2005, 2506-2513	2.3	162
299	Hollow Iron-Vanadium Composite Spheres: A Highly Efficient Iron-Based Water Oxidation Electrocatalyst without the Need for Nickel or Cobalt. *Angewandte Chemie - International Edition*, **2017**, 56, 3289-3293	16.4	161

298	Inorganic Colloidal Perovskite Quantum Dots for Robust Solar CO Reduction. *Chemistry - A European Journal*, **2017**, 23, 9481-9485	4.8	161
297	A metal-free "black dye" for panchromatic dye-sensitized solar cells. *Energy and Environmental Science*, **2009**, 2, 674	35.4	142
296	A molecular copper catalyst for electrochemical water reduction with a large hydrogen-generation rate constant in aqueous solution. *Angewandte Chemie - International Edition*, **2014**, 53, 13803-7	16.4	141
295	Photocatalytic Hydrogen Production from Water by Noble-Metal-Free Molecular Catalyst Systems Containing Rose Bengal and the Cobaloximes of BFx-Bridged Oxime Ligands. *Journal of Physical Chemistry C*, **2010**, 114, 15868-15874	3.8	139
294	Iodine/iodide-free redox shuttles for liquid electrolyte-based dye-sensitized solar cells. *Energy and Environmental Science*, **2012**, 5, 9180	35.4	133
293	Iodine-free redox couples for dye-sensitized solar cells. *Journal of Materials Chemistry*, **2011**, 21, 10592		129
292	Engineering active sites on hierarchical transition bimetal oxides/sulfides heterostructure array enabling robust overall water splitting. *Nature Communications*, **2020**, 11, 5462	17.4	126
291	Integration of organometallic complexes with semiconductors and other nanomaterials for photocatalytic H2 production. *Coordination Chemistry Reviews*, **2015**, 287, 1-14	23.2	125
290	High-efficiency dye-sensitized solar cells with molecular copper phenanthroline as solid hole conductor. *Energy and Environmental Science*, **2015**, 8, 2634-2637	35.4	123
289	Pt-free tandem molecular photoelectrochemical cells for water splitting driven by visible light. *Physical Chemistry Chemical Physics*, **2014**, 16, 25234-40	3.6	117
288	A comprehensive comparison of dye-sensitized NiO photocathodes for solar energy conversion. *Physical Chemistry Chemical Physics*, **2016**, 18, 10727-38	3.6	116
287	Strategy to Boost the Efficiency of Mixed-Ion Perovskite Solar Cells: Changing Geometry of the Hole Transporting Material. *ACS Nano*, **2016**, 10, 6816-25	16.7	115
286	Electroless plated Ni–B films as highly active electrocatalysts for hydrogen production from water over a wide pH range. *Nano Energy*, **2016**, 19, 98-107	17.1	112
285	Photocatalytic H2 production in aqueous solution with host-guest inclusions formed by insertion of an FeFe-hydrogenase mimic and an organic dye into cyclodextrins. *Energy and Environmental Science*, **2012**, 5, 8220	35.4	109
284	Structural Modification of Organic Dyes for Efficient Coadsorbent-Free Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2010**, 114, 2799-2805	3.8	109
283	Metal-organic frameworks and their derivatives as electrocatalysts for the oxygen evolution reaction. *Chemical Society Reviews*, **2021**, 50, 2663-2695	58.5	107
282	Fabrication and Kinetic Study of a Ferrihydrite-Modified BiVO4 Photoanode. *ACS Catalysis*, **2017**, 7, 1868-1874	13.1	105
281	Molecular Engineering of Copper Phthalocyanines: A Strategy in Developing Dopant-Free Hole-Transporting Materials for Efficient and Ambient-Stable Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803287	21.8	105

280	A super-efficient cobalt catalyst for electrochemical hydrogen production from neutral water with 80 mV overpotential. *Energy and Environmental Science*, **2014**, 7, 329-334	35.4	104
279	Highly Efficient Photoelectrochemical Water Splitting with an Immobilized Molecular Co O Cubane Catalyst. *Angewandte Chemie - International Edition*, **2017**, 56, 6911-6915	16.4	102
278	Visible Light-Driven Water Splitting in Photoelectrochemical Cells with Supramolecular Catalysts on Photoanodes. *ACS Catalysis*, **2014**, 4, 2347-2350	13.1	102
277	Paired Electrocatalytic Oxygenation and Hydrogenation of Organic Substrates with Water as the Oxygen and Hydrogen Source. *Angewandte Chemie - International Edition*, **2019**, 58, 9155-9159	16.4	101
276	The Importance of Pendant Groups on Triphenylamine-Based Hole Transport Materials for Obtaining Perovskite Solar Cells with over 20% Efficiency. *Advanced Energy Materials*, **2018**, 8, 1701209	21.8	101
275	Inorganic Hole-Transporting Materials for Perovskite Solar Cells. *Small Methods*, **2018**, 2, 1700280	12.8	100
274	Engineering single-atomic ruthenium catalytic sites on defective nickel-iron layered double hydroxide for overall water splitting. *Nature Communications*, **2021**, 12, 4587	17.4	98
273	AgTFSI as p-type dopant for efficient and stable solid-state dye-sensitized and perovskite solar cells. *ChemSusChem*, **2014**, 7, 3252-6	8.3	97
272	Phenoxazine-Based Small Molecule Material for Efficient Perovskite Solar Cells and Bulk Heterojunction Organic Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1401720	21.8	97
271	Use of colloidal upconversion nanocrystals for energy relay solar cell light harvesting in the near-infrared region. *Journal of Materials Chemistry*, **2012**, 22, 16709		94
270	A bio-inspired coordination polymer as outstanding water oxidation catalyst via second coordination sphere engineering. *Nature Communications*, **2019**, 10, 5074	17.4	88
269	Convergent/Divergent Synthesis of a Linker-Varied Series of Dyes for Dye-Sensitized Solar Cells Based on the D35 Donor. *Advanced Energy Materials*, **2013**, 3, 1647-1656	21.8	88
268	Visible light-driven water oxidation using a covalently-linked molecular catalyst-sensitizer dyad assembled on a TiO electrode. *Chemical Science*, **2016**, 7, 1430-1439	9.4	84
267	Polymeric, Cost-Effective, Dopant-Free Hole Transport Materials for Efficient and Stable Perovskite Solar Cells. *Journal of the American Chemical Society*, **2019**, 141, 19700-19707	16.4	81
266	Electrocatalytic hydrogen evolution from neutral water by molecular cobalt tripyridine-diamine complexes. *Chemical Communications*, **2013**, 49, 9455-7	5.8	80
265	Efficient Perovskite Solar Cells Based on a Solution Processable Nickel(II) Phthalocyanine and Vanadium Oxide Integrated Hole Transport Layer. *Advanced Energy Materials*, **2017**, 7, 1602556	21.8	78
264	High conductivity Ag-based metal organic complexes as dopant-free hole-transport materials for perovskite solar cells with high fill factors. *Chemical Science*, **2016**, 7, 2633-2638	9.4	78
263	Atomically Thin Mesoporous In2O3‐x/In2S3 Lateral Heterostructures Enabling Robust Broadband-Light Photo-Electrochemical Water Splitting. *Advanced Energy Materials*, **2018**, 8, 1701114	21.8	75

262	Ru-bda: Unique Molecular Water-Oxidation Catalysts with Distortion Induced Open Site and Negatively Charged Ligands. *Journal of the American Chemical Society*, **2019**, 141, 5565-5580	16.4	74
261	The Role of 3D Molecular Structural Control in New Hole Transport Materials Outperforming Spiro-OMeTAD in Perovskite Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1601062	21.8	74
260	Immobilizing Ru(bda) Catalyst on a Photoanode via Electrochemical Polymerization for Light-Driven Water Splitting. *ACS Catalysis*, **2015**, 5, 3786-3790	13.1	74
259	Modifying organic phenoxazine dyes for efficient dye-sensitized solar cells. *Journal of Materials Chemistry*, **2011**, 21, 12462		73
258	Progress in hole-transporting materials for perovskite solar cells. *Journal of Energy Chemistry*, **2018**, 27, 650-672	12	71
257	Device Fabrication for Water Oxidation, Hydrogen Generation, and CO2 Reduction via Molecular Engineering. *Joule*, **2018**, 2, 36-60	27.8	71
256	Engineering of hole-selective contact for low temperature-processed carbon counter electrode-based perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 24272-24280	13	68
255	Constructive Effects of Alkyl Chains: A Strategy to Design Simple and Non-Spiro Hole Transporting Materials for High-Efficiency Mixed-Ion Perovskite Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1502536	21.8	68
254	Active Sites Intercalated Ultrathin Carbon Sheath on Nanowire Arrays as Integrated Core-Shell Architecture: Highly Efficient and Durable Electrocatalysts for Overall Water Splitting. *Small*, **2017**, 13, 1702018	11	66
253	Acceptor□Donor□Acceptor type ionic molecule materials for efficient perovskite solar cells and organic solar cells. *Nano Energy*, **2016**, 30, 387-397	17.1	66
252	Electrochemical and Photoelectrochemical Water Oxidation by Supported Cobalt□Oxo Cubanes. *ACS Catalysis*, **2014**, 4, 804-809	13.1	66
251	Incorporation of Counter Ions in Organic Molecules: New Strategy in Developing Dopant-Free Hole Transport Materials for Efficient Mixed-Ion Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1602736	21.8	65
250	D-A-D-Typed Hole Transport Materials for Efficient Perovskite Solar Cells: Tuning Photovoltaic Properties via the Acceptor Group. *ACS Applied Materials & Interfaces*, **2018**, 10, 19697-19703	9.5	65
249	Efficient and Stable Inverted Planar Perovskite Solar Cells Employing CuI as Hole-Transporting Layer Prepared by Solid□Gas Transformation. *Energy Technology*, **2017**, 5, 1836-1843	3.5	64
248	Tuning the HOMO and LUMO Energy Levels of Organic Dyes with N-Carboxomethylpyridinium as Acceptor To Optimize the Efficiency of Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2013**, 117, 9076-9083	3.8	64
247	Visible light-driven water oxidation promoted by host-guest interaction between photosensitizer and catalyst with a high quantum efficiency. *Journal of the American Chemical Society*, **2015**, 137, 4332-5	16.4	63
246	CdSe quantum dots/molecular cobalt catalyst co-grafted open porous NiO film as a photocathode for visible light driven H2 evolution from neutral water. *Journal of Materials Chemistry A*, **2015**, 3, 18852-18859	13	63
245	Electrical Behavior and Electron Transfer Modulation of Nickel□Copper Nanoalloys Confined in Nickel□Copper Nitrides Nanowires Array Encapsulated in Nitrogen-Doped Carbon Framework as Robust Bifunctional Electrocatalyst for Overall Water Splitting. *Advanced Functional Materials*, **2018**, 28, 1803278	15.6	63

244	Promoting Effect of Electrostatic Interaction between a Cobalt Catalyst and a Xanthene Dye on Visible-Light-Driven Electron Transfer and Hydrogen Production. *Journal of Physical Chemistry C*, **2011**, 115, 15089-15096	3.8	63
243	Molecular complexes in water oxidation: Pre-catalysts or real catalysts. *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, **2015**, 25, 71-89	16.4	62
242	Enhanced performance of perovskite solar cells with P3HT hole-transporting materials via molecular p-type doping. *RSC Advances*, **2016**, 6, 108888-108895	3.7	62
241	Efficient solid state dye-sensitized solar cells based on an oligomer hole transport material and an organic dye. *Journal of Materials Chemistry A*, **2013**, 1, 14467	13	62
240	Highly Efficient Oxidation of Water by a Molecular Catalyst Immobilized on Carbon Nanotubes. *Angewandte Chemie*, **2011**, 123, 12484-12487	3.6	62
239	Electrocatalytic water oxidation by a macrocyclic Cu(ii) complex in neutral phosphate buffer. *Chemical Communications*, **2016**, 52, 10377-80	5.8	61
238	Top-Down Approach Making Anisotropic Cellulose Aerogels as Universal Substrates for Multifunctionalization. *ACS Nano*, **2020**, 14, 7111-7120	16.7	60
237	Integration of FeOOH and Zeolitic Imidazolate Framework-Derived Nanoporous Carbon as an Efficient Electrocatalyst for Water Oxidation. *Advanced Energy Materials*, **2018**, 8, 1702598	21.8	59
236	3D Core–Shell NiFeCr Catalyst on a Cu Nanoarray for Water Oxidation: Synergy between Structural and Electronic Modulation. *ACS Energy Letters*, **2018**, 3, 2865-2874	20.1	58
235	Re-Investigation of Cobalt Porphyrin for Electrochemical Water Oxidation on FTO Surface: Formation of CoOx as Active Species. *ACS Catalysis*, **2017**, 7, 1143-1149	13.1	57
234	A solution-processable copper(II) phthalocyanine derivative as a dopant-free hole-transporting material for efficient and stable carbon counter electrode-based perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 17862-17866	13	57
233	Cu(II) Complexes as p-Type Dopants in Efficient Perovskite Solar Cells. *ACS Energy Letters*, **2017**, 2, 497-503	20.1	56
232	Promoting the Water Oxidation Catalysis by Synergistic Interactions between Ni(OH)2 and Carbon Nanotubes. *Advanced Energy Materials*, **2016**, 6, 1600516	21.8	56
231	Highly efficient molecular nickel catalysts for electrochemical hydrogen production from neutral water. *Chemical Communications*, **2014**, 50, 14153-6	5.8	55
230	Development of an organic redox couple and organic dyes for aqueous dye-sensitized solar cells. *Energy and Environmental Science*, **2012**, 5, 9752	35.4	55
229	Tailoring Active Sites in Mesoporous Defect-Rich NC/Vo-WON Heterostructure Array for Superior Electrocatalytic Hydrogen Evolution. *Advanced Energy Materials*, **2019**, 9, 1803693	21.8	53
228	1,1,2,2-Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solid-State Dye-Sensitized Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1402340	21.8	53
227	Bis(1,1-bis(2-pyridyl)ethane)copper(I/II) as an efficient redox couple for liquid dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 14550-14554	13	53

226	Visible-light-absorbing semiconductor/molecular catalyst hybrid photoelectrodes for H2 or O2 evolution: recent advances and challenges. *Sustainable Energy and Fuels*, **2017**, 1, 1641-1663	5.8	52
225	Efficient dye-sensitized solar cells based on an iodine-free electrolyte using L-cysteine/L-cystine as a redox couple. *Energy and Environmental Science*, **2012**, 5, 6290-6293	35.4	52
224	Chemical and Light-Driven Oxidation of Water Catalyzed by an Efficient Dinuclear Ruthenium Complex. *Angewandte Chemie*, **2010**, 122, 9118-9121	3.6	52
223	Defect Engineering of Photocatalysts for Solar Energy Conversion. *Solar Rrl*, **2020**, 4, 1900487	7.1	52
222	Integrated Design of Organic Hole Transport Materials for Efficient Solid-State Dye-Sensitized Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1401185	21.8	51
221	Why nature chose the MnCaO cluster as water-splitting catalyst in photosystem II: a new hypothesis for the mechanism of O-O bond formation. *Dalton Transactions*, **2018**, 47, 14381-14387	4.3	51
220	Efficient BiVO Photoanodes by Postsynthetic Treatment: Remarkable Improvements in Photoelectrochemical Performance from Facile Borate Modification. *Angewandte Chemie - International Edition*, **2019**, 58, 19027-19033	16.4	51
219	Enhancement of p-type dye-sensitized solar cell performance by supramolecular assembly of electron donor and acceptor. *Scientific Reports*, **2014**, 4, 4282	4.9	50
218	Defective and □-Disordered□Hortensia-like Layered MnOx as an Efficient Electrocatalyst for Water Oxidation at Neutral pH. *ACS Catalysis*, **2017**, 7, 6311-6322	13.1	50
217	Chemical Dopant Engineering in Hole Transport Layers for Efficient Perovskite Solar Cells: Insight into the Interfacial Recombination. *ACS Nano*, **2018**, 12, 10452-10462	16.7	50
216	Chemical and Physical Reduction of High Valence Ni States in Mesoporous NiO Film for Solar Cell Application. *ACS Applied Materials & Interfaces*, **2017**, 9, 33470-33477	9.5	49
215	Electrocatalytic water oxidation by copper(ii) complexes containing a tetra- or pentadentate amine-pyridine ligand. *Chemical Communications*, **2017**, 53, 4374-4377	5.8	49
214	Interfacial Engineering of Perovskite Solar Cells by Employing a Hydrophobic Copper Phthalocyanine Derivative as Hole-Transporting Material with Improved Performance and Stability. *ChemSusChem*, **2017**, 10, 1838-1845	8.3	48
213	Conformational and Compositional Tuning of Phenanthrocarbazole-Based Dopant-Free Hole-Transport Polymers Boosting the Performance of Perovskite Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 17681-17692	16.4	48
212	Highly Active Three-Dimensional NiFe/Cu O Nanowires/Cu Foam Electrode for Water Oxidation. *ChemSusChem*, **2017**, 10, 1475-1481	8.3	47
211	Visible light-driven water oxidation with a subporphyrin sensitizer and a water oxidation catalyst. *Chemical Communications*, **2016**, 52, 13702-13705	5.8	47
210	One plus one greater than two: high-performance inverted planar perovskite solar cells based on a composite CuI/CuSCN hole-transporting layer. *Journal of Materials Chemistry A*, **2018**, 6, 21435-21444	13	46
209	Photocatalytic water oxidation at soft interfaces. *Chemical Science*, **2014**, 5, 2683-2687	9.4	45

208	Red-Absorbing Cationic Acceptor Dyes for Photocathodes in Tandem Solar Cells. *Journal of Physical Chemistry C*, **2014**, 118, 16536-16546	3.8	45
207	Immobilization of a Molecular Ruthenium Catalyst on Hematite Nanorod Arrays for Water Oxidation with Stable Photocurrent. *ChemSusChem*, **2015**, 8, 3242-7	8.3	45
206	Efficient dye-sensitized solar cells with [copper(6,6?-dimethyl-2,2?-bipyridine)2]2+/1+ redox shuttle. *RSC Advances*, **2017**, 7, 4611-4615	3.7	44
205	High-Performance Regular Perovskite Solar Cells Employing Low-Cost Poly(ethylenedioxythiophene) as a Hole-Transporting Material. *Scientific Reports*, **2017**, 7, 42564	4.9	44
204	Lead-Free Halide Double Perovskite Cs AgBiBr with Decreased Band Gap. *Angewandte Chemie - International Edition*, **2020**, 59, 15191-15194	16.4	44
203	Molecular engineering for efficient and selective iron porphyrin catalysts for electrochemical reduction of CO to CO. *Chemical Communications*, **2016**, 52, 14478-14481	5.8	44
202	Chemistry Future: Priorities and Opportunities from the Sustainability Perspective. *ChemSusChem*, **2017**, 10, 6-13	8.3	43
201	Selectively Etching Vanadium Oxide to Modulate Surface Vacancies of Unary Metal Based Electrocatalysts for High-Performance Water Oxidation. *Advanced Energy Materials*, **2020**, 10, 1903571	21.8	43
200	Achieving High Open-Circuit Voltages up to 1.57 V in Hole-Transport-Material-Free MAPbBr3 Solar Cells with Carbon Electrodes. *Advanced Energy Materials*, **2018**, 8, 1701159	21.8	42
199	An iron-based thin film as a highly efficient catalyst for electrochemical water oxidation in a carbonate electrolyte. *Chemical Communications*, **2016**, 52, 5753-6	5.8	42
198	Gas-templating of hierarchically structured NiCoP for efficient electrocatalytic hydrogen evolution. *Journal of Materials Chemistry A*, **2017**, 5, 7564-7570	13	41
197	Copper-based homogeneous and heterogeneous catalysts for electrochemical water oxidation. *Nanoscale*, **2020**, 12, 4187-4218	7.7	41
196	Graphene Dots Embedded Phosphide Nanosheet-Assembled Tubular Arrays for Efficient and Stable Overall Water Splitting. *ACS Applied Materials & Interfaces*, **2017**, 9, 24600-24607	9.5	40
195	Optically Transparent Wood Substrate for Perovskite Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6061-6067	8.3	40
194	Type-II colloidal quantum dot sensitized solar cells with a thiourea based organic redox couple. *Journal of Materials Chemistry*, **2012**, 22, 6032		39
193	Iron-Based Molecular Water Oxidation Catalysts: Abundant, Cheap, and Promising. *Chemistry - an Asian Journal*, **2019**, 14, 31-43	4.5	38
192	Ultrafast Relaxation Dynamics in Zinc Tetraphenylporphyrin Surface-Mounted Metal Organic Framework. *Journal of Physical Chemistry C*, **2018**, 122, 50-61	3.8	38
191	Phenothiazine derivatives-based D and D organic dyes for dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 24377	3.7	37

190	Design and synthesis of dopant-free organic hole-transport materials for perovskite solar cells. *Chemical Communications*, **2018**, 54, 9571-9574	5.8	36
189	A Molecular Copper Catalyst for Electrochemical Water Reduction with a Large Hydrogen-Generation Rate Constant in Aqueous Solution. *Angewandte Chemie*, **2014**, 126, 14023-14027	3.6	36
188	The combination of a new organic D-A dye with different organic hole-transport materials for efficient solid-state dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 4420-4427	13	35
187	A highly efficient colourless sulfur/iodide-based hybrid electrolyte for dye-sensitized solar cells. *RSC Advances*, **2012**, 2, 3625	3.7	35
186	Molecular engineering of D-A-A sensitizers for highly efficient solid-state dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 3157-3166	13	34
185	A Cu-Based Nanoparticulate Film as Super-Active and Robust Catalyst Surpasses Pt for Electrochemical H2 Production from Neutral and Weak Acidic Aqueous Solutions. *Advanced Energy Materials*, **2016**, 6, 1502319	21.8	34
184	Photocatalytic water oxidation via combination of BiVO4-RGO and molecular cobalt catalysts. *Chemical Communications*, **2016**, 52, 3050-3	5.8	34
183	In Situ Phase-Induced Spatial Charge Separation in Core-Shell Oxynitride Nanocube Heterojunctions Realizing Robust Solar Water Splitting. *Advanced Energy Materials*, **2017**, 7, 1700171	21.8	33
182	Evident Enhancement of Photoelectrochemical Hydrogen Production by Electroless Deposition of M-B (M = Ni, Co) Catalysts on Silicon Nanowire Arrays. *ACS Applied Materials & Interfaces*, **2016**, 8, 30143-30151	9.5	33
181	Planar FAPbBr3 Solar Cells with Power Conversion Efficiency above 10%. *ACS Energy Letters*, **2018**, 3, 1808-1814	20.1	33
180	Characterization of a trinuclear ruthenium species in catalytic water oxidation by Ru(bda)(pic)2 in neutral media. *Chemical Communications*, **2016**, 52, 8619-22	5.8	32
179	A new type of organic sensitizers with pyridine-N-oxide as the anchoring group for dye-sensitized solar cells. *RSC Advances*, **2013**, 3, 13677	3.7	32
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