Radek Zboril

List of Publications by Year in Descending Order

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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.

618 papers	42,908 citations	92 h-index	191 g-index
682 ext. papers	49,033 ext. citations	9.1 avg, IF	7.83 L-index

#	Paper	IF	Citations
618	Carbon Nanotube Based Metal–Organic Framework Hybrids From Fundamentals Toward Applications (Small 4/2022). *Small*, **2022**, 18, 2270017	11	
617	Hierarchical porous metal–organic framework materials for efficient oil–water separation. *Journal of Materials Chemistry A*, **2022**, 10, 2751-2785	13	3
616	Robust dual cationic ligand for stable and efficient warm-white light emission in lead-free double perovskite nanocrystals. *Applied Materials Today*, **2022**, 26, 101288	6.6	1
615	Graphene Acid for Lithium-Ion Batteries—Carboxylation Boosts Storage Capacity in Graphene. *Advanced Energy Materials*, **2022**, 12, 2103010	21.8	6
614	Silica-supported Fe/FeO nanoparticles for the catalytic hydrogenation of nitriles to amines in the presence of aluminium additives. *Nature Catalysis*, **2022**, 5, 20-29	36.5	11
613	Defect engineering over anisotropic brookite toward substrate-specific photo-oxidation of alcohols. *Chem Catalysis*, **2022**,		5
612	Reusable Co-nanoparticles for general and selective -alkylation of amines and ammonia with alcohols.. *Chemical Science*, **2021**, 13, 111-117	9.4	5
611	Optimized Pt Single Atom Harvesting on TiO Nanotubes-Towards a Most Efficient Photocatalyst. *Small*, **2021**, e2104892	11	13
610	Emerging MXene@Metal-Organic Framework Hybrids: Design Strategies toward Versatile Applications. *ACS Nano*, **2021**,	16.7	10
609	Rational Design of Graphene Derivatives for Electrochemical Reduction of Nitrogen to Ammonia. *ACS Nano*, **2021**,	16.7	9
608	Single-Atom (Iron-Based) Catalysts: Synthesis and Applications. *Chemical Reviews*, **2021**, 121, 13620-13697	68.1	23
607	Enhancing Photoelectrochemical Energy Storage by Large-Area CdS-Coated Nickel Nanoantenna Arrays. *ACS Applied Energy Materials*, **2021**, 4, 11367-11376	6.1	2
606	Graphene oxide interaction with Lemna minor: Root barrier strong enough to prevent nanoblade-morphology-induced toxicity. *Chemosphere*, **2021**, 291, 132739	8.4	0
605	Single Co-Atoms as Electrocatalysts for Efficient Hydrazine Oxidation Reaction. *Small*, **2021**, 17, e2006477	11	16
604	Carbon Nitride-Based Ruthenium Single Atom Photocatalyst for CO Reduction to Methanol. *Small*, **2021**, 17, e2006478	11	43
603	Carbon Dots Detect Water-to-Ice Phase Transition and Act as Alcohol Sensors Fluorescence Turn-Off/On Mechanism. *ACS Nano*, **2021**, 15, 6582-6593	16.7	14
602	Spatially Confined Formation of Single Atoms in Highly Porous Carbon Nitride Nanoreactors. *ACS Nano*, **2021**, 15, 7790-7798	16.7	9

601	Covalently Interlinked Graphene Sheets with Sulfur-Chains Enable Superior Lithium–Sulfur Battery Cathodes at Full-Mass Level. *Advanced Functional Materials*, **2021**, 31, 2101326	15.6	6
600	Advanced Photocatalysts: Pinning Single Atom Co-Catalysts on Titania Nanotubes. *Advanced Functional Materials*, **2021**, 31, 2102843	15.6	16
599	Solar steam generation on scalable ultrathin thermoplasmonic TiN nanocavity arrays. *Nano Energy*, **2021**, 83, 105828	17.1	18
598	Ultrafine TiO2 Nanoparticle Supported Nitrogen-Rich Graphitic Porous Carbon as an Efficient Anode Material for Potassium-Ion Batteries. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100042	1.6	2
597	Silver Covalently Bound to Cyanographene Overcomes Bacterial Resistance to Silver Nanoparticles and Antibiotics. *Advanced Science*, **2021**, 8, 2003090	13.6	13
596	Condensed Clustered Iron Oxides for Ultrahigh Photothermal Conversion and Multimodal Imaging. *ACS Applied Materials & Interfaces*, **2021**, 13, 29247-29256	9.5	6
595	Nanoscale Assembly of BiVO4/CdS/CoOx Core–Shell Heterojunction for Enhanced Photoelectrochemical Water Splitting. *Catalysts*, **2021**, 11, 682	4	2
594	An Earth-Abundant Ni-Based Single-Atom Catalyst for Selective Photodegradation of Pollutants. *Solar Rrl*, **2021**, 5, 2100176	7.1	12
593	Transparent and Low-Loss Luminescent Solar Concentrators Based on Self-Trapped Exciton Emission in Lead-Free Double Perovskite Nanocrystals. *ACS Applied Energy Materials*, **2021**, 4, 6445-6453	6.1	10
592	Addition Reaction between Piperidine and C to Form 1,4-Disubstituted C Proceeds through van der Waals and Dative Bond Complexes: Theoretical and Experimental Study. *Journal of the American Chemical Society*, **2021**, 143, 10930-10939	16.4	3
591	Controlling phase fraction and crystal orientation via thermal oxidation of iron foils for enhanced photoelectrochemical performance. *Catalysis Today*, **2021**, 361, 117-123	5.3	1
590	The Existence of a N-C Dative Bond in the C60–Piperidine Complex. *Angewandte Chemie*, **2021**, 133, 1970-1978	3.6	3
589	The Existence of a N-C Dative Bond in the C -Piperidine Complex. *Angewandte Chemie - International Edition*, **2021**, 60, 1942-1950	16.4	10
588	Advanced Cr(VI) sorption properties of activated carbon produced via pyrolysis of the "Posidonia oceanica" seagrass. *Journal of Hazardous Materials*, **2021**, 405, 124274	12.8	29
587	Covalent Graphene-MOF Hybrids for High-Performance Asymmetric Supercapacitors. *Advanced Materials*, **2021**, 33, e2004560	24	51
586	Elucidating the role of surface states of BiVO4 with Mo doping and a CoOOH co-catalyst for photoelectrochemical water splitting. *Journal of Power Sources*, **2021**, 483, 229080	8.9	18
585	Steric and Electronic Effects of Phosphane Additives on the Catalytic Performance of Colloidal Palladium Nanoparticles in the Semi-Hydrogenation of Alkynes. *ChemCatChem*, **2021**, 13, 227-234	5.2	3
584	Carboxylated Graphene for Radical-Assisted Ultra-Trace-Level Water Treatment and Noble Metal Recovery. *ACS Nano*, **2021**, 15, 3349-3358	16.7	11

583	Structure-directed formation of the dative/covalent bonds in complexes with Cpiperidine. *Physical Chemistry Chemical Physics*, **2021**, 23, 4365-4375	3.6	6
582	In situ coating amorphous boride on ternary pyrite-type boron sulfide for highly efficient oxygen evolution. *Journal of Materials Chemistry A*, **2021**, 9, 12283-12290	13	1
581	Nanometallurgy in solution: organometallic synthesis of intermetallic Pd-Ga colloids and their activity in semi-hydrogenation catalysis. *Nanoscale*, **2021**, 13, 15038-15047	7.7	
580	Silver nanomaterials: synthesis and (electro/photo) catalytic applications. *Chemical Society Reviews*, **2021**, 50, 11293-11380	58.5	20
579	Asymmetric Supercapacitors: Covalent Graphene-MOF Hybrids for High-Performance Asymmetric Supercapacitors (Adv. Mater. 4/2021). *Advanced Materials*, **2021**, 33, 2170028	24	4
578	Single-Atom Catalysts: A Sustainable Pathway for the Advanced Catalytic Applications. *Small*, **2021**, 17, e2006473	11	47
577	Convenient and Reusable Manganese-Based Nanocatalyst for Amination of Alcohols. *ChemCatChem*, **2021**, 13, 4334	5.2	4
576	Graphene with Covalently Grafted Amino Acid as a Route Toward Eco-Friendly and Sustainable Supercapacitors. *ChemSusChem*, **2021**, 14, 3904-3914	8.3	5
575	Uncovering the Role of Trioctylphosphine on Colloidal and Emission Stability of Sb-Alloyed CsNaInCl Double Perovskite Nanocrystals. *ACS Applied Materials & Interfaces*, **2021**, 13, 47845-47859	9.5	7
574	Environmental implications of one-century COPRs evolution in a single industrial site: From leaching impact to sustainable remediation of Cr polluted groundwater. *Chemosphere*, **2021**, 283, 131211	8.4	2
573	A multifunctional covalently linked graphene–MOF hybrid as an effective chemiresistive gas sensor. *Journal of Materials Chemistry A*, **2021**, 9, 17434-17441	13	5
572	The Hallmarks of Copper Single Atom Catalysts in Direct Alcohol Fuel Cells and Electrochemical CO2 Fixation. *Advanced Materials Interfaces*, **2021**, 8, 2001822	4.6	19
571	Peptide nucleic acid stabilized perovskite nanoparticles for nucleic acid sensing. *Materials Today Chemistry*, **2020**, 17, 100272	6.2	3
570	Nano-immobilized flumequine with preserved antibacterial efficacy. *Colloids and Surfaces B: Biointerfaces*, **2020**, 191, 111019	6	2
569	Smart synthetic maghemite nanoparticles with unique surface properties encode binding specificity toward As. *Science of the Total Environment*, **2020**, 741, 140175	10.2	5
568	Molybdenum-promoted cobalt supported on SBA-15: Steam and sulfur dioxide stable catalyst for CO oxidation. *Applied Catalysis B: Environmental*, **2020**, 277, 119248	21.8	18
567	Purple-emissive carbon dots enhance sensitivity of Si photodetectors to ultraviolet range. *Nanoscale*, **2020**, 12, 8379-8384	7.7	21
566	Determining Plasmonic Hot Electrons and Photothermal Effects during H2 Evolution with TiN–Pt Nanohybrids. *ACS Catalysis*, **2020**, 10, 5261-5271	13.1	66

565	Multi-Leg TiO2 Nanotube Photoelectrodes Modified by Platinized Cyanographene with Enhanced Photoelectrochemical Performance. *Catalysts*, **2020**, 10, 717	4	4
564	Core-Shell Fe/FeS Nanoparticles with Controlled Shell Thickness for Enhanced Trichloroethylene Removal. *ACS Applied Materials & Interfaces*, **2020**, 12, 35424-35434	9.5	27
563	Enhancing Magnetic Cooperativity in Fe(II) Triazole-based Spin-crossover Nanoparticles by Pluronic Matrix Confinement. *Chemistry - an Asian Journal*, **2020**, 15, 2637-2641	4.5	
562	N-Graphitic Modified Cobalt Nanoparticles Supported on Graphene for Tandem Dehydrogenation of Ammonia□Borane and Semihydrogenation of Alkynes. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11058-11068	8.3	7
561	An Operando X-ray Absorption Spectroscopy Study of a NiCu□TiO2 Photocatalyst for H2 Evolution. *ACS Catalysis*, **2020**, 10, 8293-8302	13.1	25
560	Atomic-Scale Charge Distribution Mapping of Single Substitutional p- and n-Type Dopants in Graphene. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 3437-3444	8.3	3
559	Ultra-small cobalt nanoparticles from molecularly-defined Co-salen complexes for catalytic synthesis of amines. *Chemical Science*, **2020**, 11, 2973-2981	9.4	21
558	Light- and temperature-assisted spin state annealing: accessing the hidden multistability. *Chemical Science*, **2020**, 11, 3281-3289	9.4	13
557	On the Controlled Loading of Single Platinum Atoms as a Co-Catalyst on TiO Anatase for Optimized Photocatalytic H Generation. *Advanced Materials*, **2020**, 32, e1908505	24	100
556	A carbon dot-based tandem luminescent solar concentrator. *Nanoscale*, **2020**, 12, 6664-6672	7.7	36
555	Sustainable Synthesis of Nanoscale Zerovalent Iron Particles for Environmental Remediation. *ChemSusChem*, **2020**, 13, 3288-3305	8.3	19
554	Graphitic Carbon Nitride□Nickel Catalyst: From Material Characterization to Efficient Ethanol Electrooxidation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 7244-7255	8.3	20
553	Mechanochemical synthesis of Cu2S bonded 2D-sulfonated organic polymers: continuous production of dimethyl carbonate (DMC) via preheating of reactants. *Green Chemistry*, **2020**, 22, 5619-5627	10	9
552	Carbon-Based Single-Atom Catalysts for Advanced Applications. *ACS Catalysis*, **2020**, 10, 2231-2259	13.1	202
551	Tracing of iron nanoparticles using an elemental signatures approach: laboratory and field-scale verification. *Environmental Science: Nano*, **2020**, 7, 623-633	7.1	2
550	Influence of Ti3+ defect-type on heterogeneous photocatalytic H2 evolution activity of TiO2. *Journal of Materials Chemistry A*, **2020**, 8, 1432-1442	13	45
549	Immobilized Enzymes on Graphene as Nanobiocatalyst. *ACS Applied Materials & Interfaces*, **2020**, 12, 250-259	9.5	29
548	FeO-based nanostructures and nanohybrids for photoelectrochemical water splitting. *Progress in Materials Science*, **2020**, 110, 100632	42.2	33

547	Pinning ultrasmall greigite nanoparticles on graphene for effective transition-metal-sulfide supercapacitors in an ionic liquid electrolyte. *Journal of Materials Chemistry A*, **2020**, 8, 25716-25726	13	7
546	High-performance hydrogen evolution electrocatalysis using proton-intercalated TiO2 nanotube arrays as interactive supports for Ir nanoparticles. *Journal of Materials Chemistry A*, **2020**, 8, 22773-22790	13	17
545	Nitrogen-Doped Graphene Aerogel for Simultaneous Detection of Dopamine and Ascorbic Acid in Artificial Cerebrospinal Fluid. *Journal of the Electrochemical Society*, **2020**, 167, 116521	3.9	4
544	Hierarchical Porous Graphene-Iron Carbide Hybrid Derived From Functionalized Graphene-Based Metal-Organic Gel as Efficient Electrochemical Dopamine Sensor. *Frontiers in Chemistry*, **2020**, 8, 544	5	5
543	The environmental fate of graphene oxide in aquatic environment-Complete mitigation of its acute toxicity to planktonic and benthic crustaceans by algae. *Journal of Hazardous Materials*, **2020**, 399, 123027	12.8	10
542	P- and F-co-doped Carbon Nitride Nanocatalysts for Photocatalytic CO Reduction and Thermocatalytic Furanics Synthesis from Sugars. *ChemSusChem*, **2020**, 13, 5231-5238	8.3	29
541	MHP@MOF Hybrids: Metal Halide Perovskite@Metal-Organic Framework Hybrids: Synthesis, Design, Properties, and Applications (Small 47/2020). *Small*, **2020**, 16, 2070258	11	
540	Colloidal maghemite nanoparticles with oxyhydroxide-like interface and chiroptical properties. *Applied Surface Science*, **2020**, 534, 147567	6.7	6
539	Human virus detection with graphene-based materials. *Biosensors and Bioelectronics*, **2020**, 166, 112436	11.8	74
538	Dual-Function HKUST-1: Templating and Catalyzing Formation of Graphitic Carbon Nitride Quantum Dots Under Mild Conditions. *Angewandte Chemie - International Edition*, **2020**, 59, 21499-21504	16.4	10
537	Dual-Function HKUST-1: Templating and Catalyzing Formation of Graphitic Carbon Nitride Quantum Dots Under Mild Conditions. *Angewandte Chemie*, **2020**, 132, 21683-21688	3.6	4
536	Pressure-Modulated Broadband Emission in 2D Layered Hybrid Perovskite-Like Bromoplumbate. *Inorganic Chemistry*, **2020**, 59, 12431-12436	5.1	6
535	Nanoporous Activated Carbon Derived via Pyrolysis Process of Spent Coffee: Structural Characterization. Investigation of Its Use for Hexavalent Chromium Removal. *Applied Sciences (Switzerland)*, **2020**, 10, 8812	2.6	8
534	Biotechnological applications of nanostructured hybrids of polyamine carbon quantum dots and iron oxide nanoparticles. *Amino Acids*, **2020**, 52, 301-311	3.5	6
533	Recent development of covalent organic frameworks (COFs): synthesis and catalytic (organic-electro-photo) applications. *Materials Horizons*, **2020**, 7, 411-454	14.4	153
532	Fe(0)-embedded thermally reduced graphene oxide as efficient nanocatalyst for reduction of nitro compounds to amines. *Chemical Engineering Journal*, **2020**, 382, 122469	14.7	28
531	Solar Thermoplasmonic Nanofurnace for High-Temperature Heterogeneous Catalysis. *Nano Letters*, **2020**, 20, 3663-3672	11.5	20
530	Tailoring topological order and π-conjugation to engineer quasi-metallic polymers. *Nature Nanotechnology*, **2020**, 15, 437-443	28.7	46

529	Densely Functionalized Cyanographene Bypasses Aqueous Electrolytes and Synthetic Limitations Toward Seamless Graphene/FeOOH Hybrids for Supercapacitors. *Advanced Functional Materials*, **2019**, 29, 1906998	15.6	11
528	Spin Crossover in Iron(II) Porphyrazine Induced by Noncovalent Interactions Combined with Hybridization of Iron(II) Porphyrazine and Ligand Orbitals: CASPT2, CCSD(T), and DFT Studies. *Journal of Physical Chemistry C*, **2019**, 123, 23186-23194	3.8	4
527	Spin-Crossover Phenomenon in Microcrystals and Nanoparticles of a [Fe(2-mpz)Ni(CN)] Two-Dimensional Hofmann-Type Polymer: A Detailed Nano-Topographic Study. *Inorganic Chemistry*, **2019**, 58, 13733-13736	5.1	12
526	Large Enhancement of the Nonlinear Optical Response of Fluorographene by Chemical Functionalization: The Case of Diethyl-amino-fluorographene. *Journal of Physical Chemistry C*, **2019**, 123, 25856-25862	3.8	7
525	Bimodal role of fluorine atoms in fluorographene chemistry opens a simple way toward double functionalization of graphene. *Carbon*, **2019**, 145, 251-258	10.4	6
524	Polypyrrole and Carbon Nanotube Co-Composited Titania Anodes with Enhanced Sodium Storage Performance in Ether-Based Electrolyte. *Advanced Sustainable Systems*, **2019**, 3, 1800154	5.9	4
523	Stealth Iron Oxide Nanoparticles for Organotropic Drug Targeting. *Biomacromolecules*, **2019**, 20, 1375-1384	6.9	21
522	Nanoscale Zerovalent Iron Particles for Treatment of Metalloids **2019**, 157-199		4
521	Alkynylation of graphene via the Sonogashira C-C cross-coupling reaction on fluorographene. *Chemical Communications*, **2019**, 55, 1088-1091	5.8	15
520	Carbon dots for in vivo fluorescence imaging of adipose tissue-derived mesenchymal stromal cells. *Carbon*, **2019**, 152, 434-443	10.4	30
519	Chemical Tuning of Specific Capacitance in Functionalized Fluorographene. *Chemistry of Materials*, **2019**, 31, 4698-4709	9.6	19
518	Hydrophobic Metal-Organic Frameworks. *Advanced Materials*, **2019**, 31, e1900820	24	76
517	Biologically safe colloidal suspensions of naked iron oxide nanoparticles for in situ antibiotic suppression. *Colloids and Surfaces B: Biointerfaces*, **2019**, 181, 102-111	6	7
516	On-Surface Synthesis of Gold Porphyrin Derivatives via a Cascade of Chemical Interactions: Planarization, Self-Metalation, and Intermolecular Coupling. *Chemistry of Materials*, **2019**, 31, 3248-3256	9.6	22
515	Single-Atom Catalysis: Mixed-Valence Single-Atom Catalyst Derived from Functionalized Graphene (Adv. Mater. 17/2019). *Advanced Materials*, **2019**, 31, 1970125	24	5
514	Self-assembly of chlorin-e6 on FeO nanoparticles: Application for larvicidal activity against Aedes aegypti. *Journal of Photochemistry and Photobiology B: Biology*, **2019**, 194, 21-31	6.7	14
513	Metal Organic Framework (MOF) Derived Electrodes with Robust and Fast Lithium Storage for Li-Ion Hybrid Capacitors. *Advanced Functional Materials*, **2019**, 29, 1900532	15.6	98
512	Thiophenol-Modified Fluorographene Derivatives for Nonlinear Optical Applications. *ChemPlusChem*, **2019**, 84, 1288-1298	2.8	11

511	Fe2O3 Blocking Layer Produced by Cyclic Voltammetry Leads to Improved Photoelectrochemical Performance of Hematite Nanorods. *Surfaces*, **2019**, 2, 131-144	2.9	8
510	Plasmon-Enhanced Photoelectrochemical Water Splitting for Efficient Renewable Energy Storage. *Advanced Materials*, **2019**, 31, e1805513	24	111
509	Conductive Cu-Doped TiO2 Nanotubes for Enhanced Photoelectrochemical Methanol Oxidation and Concomitant Hydrogen Generation. *ChemElectroChem*, **2019**, 6, 1244-1249	4.3	10
508	Mixed-Valence Single-Atom Catalyst Derived from Functionalized Graphene. *Advanced Materials*, **2019**, 31, e1900323	24	76
507	Cyanographene and Graphene Acid: The Functional Group of Graphene Derivative Determines the Application in Electrochemical Sensing and Capacitors. *ChemElectroChem*, **2019**, 6, 229-234	4.3	17
506	Generation and Stabilization of Small Platinum Clusters Pt Inside a Metal-Organic Framework. *Journal of the American Chemical Society*, **2019**, 141, 13962-13969	16.4	26
505	Intrinsic photoluminescence of amine-functionalized graphene derivatives for bioimaging applications. *Applied Materials Today*, **2019**, 17, 112-122	6.6	17
504	Microwave Energy Drives "On-Off-On" Spin-Switch Behavior in Nitrogen-Doped Graphene. *Advanced Materials*, **2019**, 31, e1902587	24	10
503	Metal□Organic Frameworks: Hydrophobic Metal□Organic Frameworks (Adv. Mater. 32/2019). *Advanced Materials*, **2019**, 31, 1970230	24	25
502	H2O2 Tolerance in Pseudomonas Fluorescens: Synergy between Pyoverdine-Iron(III) Complex and a Blue Extracellular Product Revealed by a Nanotechnology-Based Electrochemical Approach. *ChemElectroChem*, **2019**, 6, 5186-5190	4.3	3
501	Providing significantly enhanced photocatalytic H2 generation using porous PtPdAg alloy nanoparticles on spaced TiO2 nanotubes. *International Journal of Hydrogen Energy*, **2019**, 44, 22962-22971	6.7	22
500	Shape-Assisted 2D MOF/Graphene Derived Hybrids as Exceptional Lithium-Ion Battery Electrodes. *Advanced Functional Materials*, **2019**, 29, 1902539	15.6	71
499	Toxicity of graphene oxide against algae and cyanobacteria: Nanoblade-morphology-induced mechanical injury and self-protection mechanism. *Carbon*, **2019**, 155, 386-396	10.4	34
498	H2O2 Tolerance in Pseudomonas Fluorescens: Synergy between Pyoverdine-Iron(III) Complex and a Blue Extracellular Product Revealed by a Nanotechnology-Based Electrochemical Approach. *ChemElectroChem*, **2019**, 6, 5166-5166	4.3	
497	Amorphous Mo-Ta Oxide Nanotubes for Long-Term Stable Mo Oxide-Based Supercapacitors. *ACS Applied Materials & Interfaces*, **2019**, 11, 45665-45673	9.5	7
496	Photocatalytic H2 Evolution: Dealloying as Efficient Tool for the Fabrication of Rh-decorated TiO2 Nanotubes. *ChemCatChem*, **2019**, 11, 6258-6262	5.2	11
495	Chapter 3:Support Morphology-dependent Activity of Nanocatalysts. *RSC Catalysis Series*, **2019**, 84-114	0.3	2
494	Radiative and Non-Radiative Recombination Pathways in Mixed-Phase TiO2 Nanotubes for PEC Water-Splitting. *Catalysts*, **2019**, 9, 204	4	25

493	On-Surface Synthesis of Ethynylene-Bridged Anthracene Polymers. *Angewandte Chemie - International Edition*, **2019**, 58, 6559-6563	16.4	31
492	Electric-field enhanced reactivity and migration of iron nanoparticles with implications for groundwater treatment technologies: Proof of concept. *Water Research*, **2019**, 154, 361-369	12.5	14
491	Selective Functionalization Blended with Scaffold Conductivity in Graphene Acid Promotes HO Electrochemical Sensing. *ACS Omega*, **2019**, 4, 19944-19952	3.9	12
490	Thermally reduced fluorographenes as efficient electrode materials for supercapacitors. *Nanoscale*, **2019**, 11, 21364-21375	7.7	10
489	Carboxymethylcellulose-based magnetic Au or Ag nanosystems: Eminent candidates in catalysis, sensing applications based on SERS, and electrochemistry. *Applied Materials Today*, **2019**, 14, 143-150	6.6	9
488	Recyclable Magnetic Microporous Organic Polymer (MOP) Encapsulated with Palladium Nanoparticles and Co/C Nanobeads for Hydrogenation Reactions. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 2388-2399	8.3	20
487	US-Czech conference strengthens bilateral and multidisciplinary collaborations in nanotechnology and chemistry. *Nanotechnology*, **2019**, 30, 052501	3.4	
486	Significant enhancement of photoactivity in one-dimensional TiO2 nanorods modified by S-, N-, O-doped carbon nanosheets. *Catalysis Today*, **2019**, 328, 111-117	5.3	8
485	Electrocatalytic methanol oxidation over Cu, Ni and bimetallic Cu-Ni nanoparticles supported on graphitic carbon nitride. *Applied Catalysis B: Environmental*, **2019**, 244, 272-283	21.8	161
484	Chloroplasts preferentially take up ferric-citrate over iron-nicotianamine complexes in Brassica napus. *Planta*, **2019**, 249, 751-763	4.7	13
483	Photocatalysis with Reduced TiO: From Black TiO to Cocatalyst-Free Hydrogen Production. *ACS Catalysis*, **2019**, 9, 345-364	13.1	295
482	Intrinsic Cu nanoparticle decoration of TiO2 nanotubes: A platform for efficient noble metal free photocatalytic H2 production. *Electrochemistry Communications*, **2019**, 98, 82-86	5.1	21
481	Unveiling BiVO4 nanorods as a novel anode material for high performance lithium ion capacitors: beyond intercalation strategies. *Journal of Materials Chemistry A*, **2018**, 6, 6096-6106	13	58
480	Sb-Doped SnO Nanorods Underlayer Effect to the Fe O Nanorods Sheathed with TiO for Enhanced Photoelectrochemical Water Splitting. *Small*, **2018**, 14, e1703860	11	46
479	Morphology-Dependent Magnetism in Nanographene: Beyond Nanoribbons. *Advanced Functional Materials*, **2018**, 28, 1800592	15.6	3
478	Hematite Photoanode with Complex Nanoarchitecture Providing Tunable Gradient Doping and Low Onset Potential for Photoelectrochemical Water Splitting. *ChemSusChem*, **2018**, 11, 1873-1879	8.3	25
477	An efficient copper-based magnetic nanocatalyst for the fixation of carbon dioxide at atmospheric pressure. *Scientific Reports*, **2018**, 8, 1901	4.9	49
476	Near-Infrared Excitation/Emission and Multiphoton-Induced Fluorescence of Carbon Dots. *Advanced Materials*, **2018**, 30, e1705913	24	255

475	Spaced Titania Nanotube Arrays Allow the Construction of an Efficient N-Doped Hierarchical Structure for Visible-Light Harvesting. *ChemistryOpen*, **2018**, 7, 131-135	2.3	3
474	Reactivity of fluorographene is triggered by point defects: beyond the perfect 2D world. *Nanoscale*, **2018**, 10, 4696-4707	7.7	45
473	Pt nanoparticles decorated TiO2 nanotubes for the reduction of olefins. *Applied Materials Today*, **2018**, 10, 86-92	6.6	13
472	RNA nanopatterning on graphene. *2D Materials*, **2018**, 5, 031006	5.9	10
471	Templated Dewetting–Alloying of NiCu Bilayers on TiO2 Nanotubes Enables Efficient Noble-Metal-Free Photocatalytic H2 Evolution. *ACS Catalysis*, **2018**, 8, 5298-5305	13.1	50
470	Label-free determination and multiplex analysis of DNA and RNA in tumor tissues. *Applied Materials Today*, **2018**, 12, 85-91	6.6	
469	Carbon Dots: Near-Infrared Excitation/Emission and Multiphoton-Induced Fluorescence of Carbon Dots (Adv. Mater. 13/2018). *Advanced Materials*, **2018**, 30, 1870092	24	5
468	Emerging chemical strategies for imprinting magnetism in graphene and related 2D materials for spintronic and biomedical applications. *Chemical Society Reviews*, **2018**, 47, 3899-3990	58.5	100
467	Simple size-controlled synthesis of Au nanoparticles and their size-dependent catalytic activity. *Scientific Reports*, **2018**, 8, 4589	4.9	190
466	Label-free determination of prostate specific membrane antigen in human whole blood at nanomolar levels by magnetically assisted surface enhanced Raman spectroscopy. *Analytica Chimica Acta*, **2018**, 997, 44-51	6.6	16
465	Nanoarchitecture of advanced core-shell zero-valent iron particles with controlled reactivity for contaminant removal. *Chemical Engineering Journal*, **2018**, 354, 335-345	14.7	24
464	Carbon Dot Fluorescence-Lifetime-Encoded Anti-Counterfeiting. *ACS Applied Materials & Interfaces*, **2018**, 10, 29902-29908	9.5	110
463	TiO2 Nanotubes on Transparent Substrates: Control of Film Microstructure and Photoelectrochemical Water Splitting Performance. *Catalysts*, **2018**, 8, 25	4	11
462	Graphene: High-Performance Supercapacitors Based on a Zwitterionic Network of Covalently Functionalized Graphene with Iron Tetraaminophthalocyanine (Adv. Funct. Mater. 29/2018). *Advanced Functional Materials*, **2018**, 28, 1870203	15.6	
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