Zdenek Sofer

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.

505 papers	17,928 citations	67 h-index	111 g-index
551 ext. papers	21,190 ext. citations	7.9 avg, IF	7.61 L-index

#	Paper	IF	Citations
505	Synthesis and Applications of Graphene Oxide.. *Materials*, **2022**, 15,	3.5	10
504	Exfoliated Fe3GeTe2 and Ni3GeTe2 materials as water splitting electrocatalysts. *FlatChem*, **2022**, 32, 100334	5.1	0
503	Biohybrid Micro- and Nanorobots for Intelligent Drug Delivery. *Cyborg and Bionic Systems*, **2022**, 2022, 1-13	0	3
502	Fine-tuning the functionality of reduced graphene oxide via bipolar electrochemistry in freestanding 2D reaction layers. *Carbon*, **2022**, 191, 439-447	10.4	2
501	Enhanced voltammetric performance of sensors based on oxidized 2D layered black phosphorus. *Talanta*, **2022**, 238, 123036	6.2	1
500	Synthesis of Magnesium Phosphorous Trichalcogenides and Applications in Photoelectrochemical Water Splitting.. *Small*, **2022**, e2200355	11	1
499	Photomodification of benzyl germanane with group 6 metal carbonyls. *FlatChem*, **2022**, 33, 100354	5.1	1
498	Flexible, ultralight, and high-energy density electrochemical capacitors using sustainable materials. *Electrochimica Acta*, **2022**, 415, 140239	6.7	1
497	The multi-energetic Au ion implantation of graphene oxide and polymers. *EPJ Web of Conferences*, **2022**, 261, 02006	0.3	
496	Electroactive nanocarbon materials as signaling tags for electrochemical PCR.. *Talanta*, **2022**, 245, 123479	6.2	0
495	Synthesis, characterisation, and feasibility studies on the use of vanadium tellurate(vi) as a cathode material for aqueous rechargeable Zn-ion batteries.. *RSC Advances*, **2022**, 12, 12211-12218	3.7	0
494	Arsenene and Antimonene **2022**, 149-172		
493	All Solution-Processed van der Waals Heterostructures for Wafer-Scale Electronics.. *Advanced Materials*, **2021**, e2106110	24	10
492	Improved CO/CH Separation Properties of Cellulose Triacetate Mixed-Matrix Membranes with CeO@GO Hybrid Fillers. *Membranes*, **2021**, 11,	3.8	3
491	Mineralizer-free synthesis of orthorhombic arsenic-phosphorus alloys. *FlatChem*, **2021**, 30, 100297	5.1	0
490	Surface oxidation of Ti3C2Tx enhances the catalytic activity of supported platinum nanoparticles in ammonia borane hydrolysis. *2D Materials*, **2021**, 8, 015001	5.9	6
489	6FDA-DAM:DABA Co-Polyimide Mixed Matrix Membranes with GO and ZIF-8 Mixtures for Effective CO/CH Separation. *Nanomaterials*, **2021**, 11,	5.4	5

488	Molybdenum Oxide Supported on TiAlC is an Active Reverse Water-Gas Shift Catalyst. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 4957-4966	8.3	6
487	Atomically Thin Nanosheets Confined in 2D Heterostructures: Metal-Ion Batteries Prospective. *Advanced Energy Materials*, **2021**, 11, 2100451	21.8	11
486	Prediction Clue on the Fading Capacity of Multi-Walled Carbon Nanotube-Decorated Li2(Fe1⊠Tix)SiO4/C High-Performance Cathode Materials. *Energy & Fuels*, **2021**, 35, 8321-8333	4.1	3
485	Photoelectrochemical Activity of Layered Metal Phosphorous Trichalcogenides for Water Oxidation. *Advanced Materials Interfaces*, **2021**, 8, 2100294	4.6	5
484	Functionalized Germanene-Based Nanomaterials for the Detection of Single Nucleotide Polymorphism. *ACS Applied Nano Materials*, **2021**, 4, 5164-5175	5.6	6
483	Two-Dimensional Gallium Sulfide Nanoflakes for UV-Selective Photoelectrochemical-type Photodetectors. *Journal of Physical Chemistry C*, **2021**, 125, 11857-11866	3.8	6
482	Cobalt Phosphorous Trisulfide as a High-Performance Electrocatalyst for the Oxygen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2021**, 13, 23638-23646	9.5	11
481	Carbonaceous Oxygen Evolution Reaction Catalysts: From Defect and Doping-Induced Activity over Hybrid Compounds to Ordered Framework Structures. *Small*, **2021**, 17, e2007484	11	7
480	Interfacial Covalent Bonds Regulated Electron-Deficient 2D Black Phosphorus for Electrocatalytic Oxygen Reactions. *Advanced Materials*, **2021**, 33, e2008752	24	18
479	Phosphorene and other layered pnictogens as a new source of 2D materials for electrochemical sensors. *TrAC - Trends in Analytical Chemistry*, **2021**, 139, 116249	14.6	8
478	Ambient-Stable Two-Dimensional CrI Organic-Inorganic Encapsulation. *ACS Nano*, **2021**, 15, 10659-10667	16.7	6
477	Self-Powered Broadband Photodetector and Sensor Based on Novel Few-Layered Pd(PS) Nanosheets. *ACS Applied Materials & Interfaces*, **2021**, 13, 30806-30817	9.5	2
476	Ruthenium on Alkali-Exfoliated Ti3(Al0.8Sn0.2)C2 MAX Phase Catalyses Reduction of 4-Nitroaniline with Ammonia Borane. *ChemCatChem*, **2021**, 13, 3470-3478	5.2	2
475	Photocatalytic activity of twist-angle stacked 2D TaS2. *Npj 2D Materials and Applications*, **2021**, 5,	8.8	2
474	Vanadium Dopants: A Boon or a Bane for Molybdenum Dichalcogenides-Based Electrocatalysis Applications. *Advanced Functional Materials*, **2021**, 31, 2009083	15.6	7
473	Modification of structure and surface morphology in various ZnO facets via low fluence gold swift heavy ion irradiation. *Surface and Interface Analysis*, **2021**, 53, 230-243	1.5	0
472	Surface Engineering Strategy Using Urea To Improve the Rate Performance of Na Ti O in Na-Ion Batteries. *Chemistry - A European Journal*, **2021**, 27, 3875-3886	4.8	6
471	Nanoconfined deep eutectic solvent in laminated MXene for efficient CO2 separation. *Chemical Engineering Journal*, **2021**, 405, 126961	14.7	24

470	Intrinsic carrier multiplication in layered Bi2O2Se avalanche photodiodes with gain bandwidth product exceeding 1 GHz. *Nano Research*, **2021**, 14, 1961-1966	10	7
469	Lithium-Assisted Exfoliation of Palladium Thiophosphate Nanosheets for Photoelectrocatalytic Water Splitting. *ACS Applied Nano Materials*, **2021**, 4, 441-448	5.6	3
468	MoS stacking matters: 3R polytype significantly outperforms 2H MoS for the hydrogen evolution reaction. *Nanoscale*, **2021**, 13, 19391-19398	7.7	4
467	Functionalized metallic transition metal dichalcogenide (TaS2) for nanocomposite membranes in direct methanol fuel cells. *Journal of Materials Chemistry A*, **2021**, 9, 6368-6381	13	12
466	Electrochemical Exfoliation of Janus-like BiTeI Nanosheets for Electrocatalytic Nitrogen Reduction. *ACS Applied Nano Materials*, **2021**, 4, 590-599	5.6	1
465	Effect of surface chemistry on bio-conjugation and bio-recognition abilities of 2D germanene materials. *Nanoscale*, **2021**, 13, 1893-1903	7.7	6
464	Rhenium Doping of Layered Transition-Metal Diselenides Triggers Enhancement of Photoelectrochemical Activity. *ACS Nano*, **2021**, 15, 2374-2385	16.7	4
463	Liquid Metals-Assisted Synthesis of Scalable 2D Nanomaterials: Prospective Sediment Inks for Screen-Printed Energy Storage Applications. *Advanced Functional Materials*, **2021**, 31, 2010320	15.6	11
462	High-yield exfoliation of 2D semiconductor monolayers and reassembly of organic/inorganic artificial superlattices. *CheM*, **2021**, 7, 1887-1902	16.2	8
461	Chiral Phonons and Giant Magneto-Optical Effect in CrBr 2D Magnet. *Advanced Materials*, **2021**, 33, e2101618	21.4	5
460	Direct Observation of Magnon-Phonon Strong Coupling in Two-Dimensional Antiferromagnet at High Magnetic Fields. *Physical Review Letters*, **2021**, 127, 097401	7.4	10
459	CeO-Blended Cellulose Triacetate Mixed-Matrix Membranes for Selective CO Separation. *Membranes*, **2021**, 11,	3.8	4
458	The Role of Alkali Cation Intercalates on the Electrochemical Characteristics of Nb CT MXene for Energy Storage. *Chemistry - A European Journal*, **2021**, 27, 13235-13241	4.8	2
457	A short investigation on LiMn2O4 wrapped with MWCNT as composite cathode for lithium-ion batteries. *Bulletin of Materials Science*, **2021**, 44, 1	1.7	
456	Integration of BiOI nanosheets into bubble-propelled micromotors for efficient water purification. *FlatChem*, **2021**, 100294	5.1	1
455	Nitrogen-doped graphene based triboelectric nanogenerators. *Nano Energy*, **2021**, 87, 106173	17.1	11
454	Edge-Hydrogenated Germanene by Electrochemical Decalcification-Exfoliation of CaGe: Germanene-Enabled Vapor Sensor. *ACS Nano*, **2021**, 15, 16709-16718	16.7	1
453	Comparison between layered Pt3Te4 and PtTe2 for electrocatalytic reduction reactions. *FlatChem*, **2021**, 29, 100280	5.1	4

452	Modified Single-Walled Carbon Nanotube Membranes for the Elimination of Antibiotics from Water. *Membranes*, **2021**, 11,	3.8	1
451	Highly exfoliated NiPS3 nanosheets as efficient electrocatalyst for high yield ammonia production. *Chemical Engineering Journal*, **2021**, 430, 132649	14.7	5
450	Understanding electrochemical capacitors with in-situ techniques. *Renewable and Sustainable Energy Reviews*, **2021**, 149, 111418	16.2	14
449	Molecular-level fabrication of highly selective composite ZIF-8-CNT-PDMS membranes for effective CO2/N2, CO2/H2 and olefin/paraffin separations. *Separation and Purification Technology*, **2021**, 274, 119003	8.3	6
448	Sub-millimetre scale Van der Waals single-crystal MoTe2 for potassium storage: Electrochemical properties, and its failure and structure evolution mechanisms. *Energy Storage Materials*, **2021**, 43, 284-292	19.4	2
447	Inverted perovskite solar cells with enhanced lifetime and thermal stability enabled by a metallic tantalum disulfide buffer layer. *Nanoscale Advances*, **2021**, 3, 3124-3135	5.1	8
446	Liquid-Phase Exfoliated Gallium Selenide for Light-Driven Thin-Film Transistors. *Advanced Electronic Materials*, **2021**, 7, 2001080	6.4	4
445	Functionalized germanane/SWCNT hybrid films as flexible anodes for lithium-ion batteries. *Nanoscale Advances*, **2021**, 3, 4440-4446	5.1	5
444	Surface modification by high-energy heavy-ion irradiation in various crystalline ZnO facets. *Physical Chemistry Chemical Physics*, **2021**, 23, 22673-22684	3.6	2
443	The effectiveness of Soxhlet extraction as a simple method for GO rinsing as a precursor of high-quality graphene. *Nanoscale Advances*, **2021**, 3, 5292-5300	5.1	0
442	Topochemical Transformation of Two-Dimensional VSe into Metallic Nonlayered VO for Water Splitting Reactions in Acidic and Alkaline Media.. *ACS Nano*, **2021**,	16.7	3
441	Polydimethylsiloxane□graphene oxide composite improving performance by ion beam irradiation. *Surface and Interface Analysis*, **2020**, 52, 1156-1162	1.5	3
440	Surface Energy of Black Phosphorus Alloys with Arsenic. *ChemNanoMat*, **2020**, 6, 821-826	3.5	4
439	Freestanding LiFe0.2Mn0.8PO4/rGO nanocomposites as high energy density fast charging cathodes for lithium-ion batteries. *Materials Today Energy*, **2020**, 16, 100416	7	4
438	Chemistry of Germanene: Surface Modification of Germanane Using Alkyl Halides. *ACS Nano*, **2020**, 14, 7319-7327	16.7	12
437	2D Germanane Derivative as a Vector for Overcoming Doxorubicin Resistance in Cancer Cells. *Applied Materials Today*, **2020**, 20, 100697	6.6	6
436	Surface Functionalization of 2D Transition Metal Oxides and Dichalcogenides via Covalent and Non-covalent Bonding for Sustainable Energy and Biomedical Applications. *ACS Applied Nano Materials*, **2020**, 3, 3116-3143	5.6	29
435	Acetonitrile-assisted exfoliation of layered grey and black arsenic: contrasting properties. *Nanoscale Advances*, **2020**, 2, 1282-1289	5.1	5

434	Tunable Room-Temperature Synthesis of ReS2 Bicatalyst on 3D- and 2D-Printed Electrodes for Photo- and Electrochemical Energy Applications. *Advanced Functional Materials*, **2020**, 30, 1910193	15.6	25
433	Layered platinum dichalcogenides (PtS2, PtSe2, PtTe2) for non-enzymatic electrochemical sensor. *Applied Materials Today*, **2020**, 19, 100606	6.6	6
432	"Top-down" Arsenene Production by Low-Potential Electrochemical Exfoliation. *Inorganic Chemistry* , **2020**, 59, 11259-11265	5.1	15
431	Comparison of GO and polymer microcapacitors prepared by ion beam writing. *Surface and Interface Analysis*, **2020**, 52, 1171-1177	1.5	
430	Microcapacitors on graphene oxide and synthetic polymers prepared by microbeam lithography. *Applied Surface Science*, **2020**, 528, 146802	6.7	3
429	Smartdust 3D-Printed Graphene-Based Al/Ga Robots for Photocatalytic Degradation of Explosives. *Small*, **2020**, 16, e2002111	11	10
428	Graphene-Supported 2D transition metal dichalcogenide van der waals heterostructures. *Applied Materials Today*, **2020**, 19, 100600	6.6	40
427	Niobium-doped TiS: Formation of TiS nanobelts and their effects in enzymatic biosensors. *Biosensors and Bioelectronics*, **2020**, 155, 112114	11.8	13
426	Molecular-Scale Characterization of Photoinduced Charge Separation in Mixed-Dimensional InSe-Organic van der Waals Heterostructures. *ACS Nano*, **2020**, 14, 3509-3518	16.7	12
425	Will Any Crap We Put into Graphene Increase Its Electrocatalytic Effect?. *ACS Nano*, **2020**, 14, 21-25	16.7	88
424	MXene Titanium Carbide-based Biosensor: Strong Dependence of Exfoliation Method on Performance. *Analytical Chemistry*, **2020**, 92, 2452-2459	7.8	75
423	Large-Scale Production of Nanocrystalline Black Phosphorus Ceramics. *ACS Applied Materials & Interfaces*, **2020**, 12, 7381-7391	9.5	13
422	Bipolar Electrochemistry Exfoliation of Layered Metal Chalcogenides Sb S and Bi S and their Hydrogen Evolution Applications. *Chemistry - A European Journal*, **2020**, 26, 6479-6483	4.8	10
421	Structural transition induced by niobium doping in layered titanium disulfide: The impact on electrocatalytic performance. *Applied Materials Today*, **2020**, 19, 100555	6.6	2
420	Solution-Processed GaSe Nanoflake-Based Films for Photoelectrochemical Water Splitting and Photoelectrochemical-Type Photodetectors. *Advanced Functional Materials*, **2020**, 30, 1909572	15.6	46
419	Free-Standing Black Phosphorus Foils for Energy Storage and Catalysis. *Chemistry - A European Journal*, **2020**, 26, 8162-8169	4.8	10
418	Emerging pnictogen-based 2D semiconductors: sensing and electronic devices. *Nanoscale*, **2020**, 12, 10430-10446	7.7	45
417	Autogenous Formation of Gold on Layered Black Phosphorus for Catalytic Purification of Waste Water. *ACS Applied Materials & Interfaces*, **2020**, 12, 22702-22709	9.5	5

416	Positive and Negative Effects of Dopants toward Electrocatalytic Activity of MoS and WS: Experiments and Theory. *ACS Applied Materials & Interfaces*, **2020**, 12, 20383-20392	9.5	22
415	Nano-LED induced chemical reactions for structuring processes. *Nanoscale Advances*, **2020**, 2, 5421-5427	5.1	6
414	Spectroscopic thickness and quality metrics for PtSe2 layers produced by top-down and bottom-up techniques. *2D Materials*, **2020**, 7, 045027	5.9	9
413	Graphitic nanofibers decorated with Ni3S2 interlaced nanosheets as efficient binder-free cathodes for hybrid supercapacitors. *Applied Surface Science*, **2020**, 505, 143828	6.7	6
412	Non-aqueous solution-processed phosphorene by controlled low-potential electrochemical exfoliation and thin film preparation. *Nanoscale*, **2020**, 12, 2638-2647	7.7	20
411	Black phosphorus□arsenic alloys for lithium ion batteries. *FlatChem*, **2020**, 19, 100143	5.1	10
410	Black arsenic: a new synthetic method by catalytic crystallization of arsenic glass. *Nanoscale*, **2020**, 12, 5397-5401	7.7	7
409	Hexagonal and Cubic Boron Nitride in Bulk and Nanosized Forms and Their Capacitive Behavior. *ChemElectroChem*, **2020**, 7, 74-77	4.3	1
408	Elements beyond graphene: Current state and perspectives of elemental monolayer deposition by bottom-up approach. *Applied Materials Today*, **2020**, 18, 100502	6.6	16
407	Layered black phosphorus as a reducing agent - decoration with group 10 elements.. *RSC Advances*, **2020**, 10, 36452-36458	3.7	1
406	Enhanced voltammetric determination of metal ions by using a bismuthene-modified screen-printed electrode. *Electrochimica Acta*, **2020**, 362, 137144	6.7	7
405	Stabilization of Black Phosphorus by Sonication-Assisted Simultaneous Exfoliation and Functionalization. *Chemistry - A European Journal*, **2020**, 26, 17581-17587	4.8	1
404	Recent Developments on the Single Atom Supported at 2D Materials Beyond Graphene as Catalysts. *ACS Catalysis*, **2020**, 10, 9634-9648	13.1	49
403	TaS, TaSe, and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. *ACS Catalysis*, **2020**, 10, 3313-3325	13.1	33
402	Boron and nitrogen dopants in graphene have opposite effects on the electrochemical detection of explosive nitroaromatic compounds. *Electrochemistry Communications*, **2020**, 112, 106660	5.1	9
401	Potential Dependent Electrochemical Exfoliation of NiPS3 and Implications for Hydrogen Evolution Reaction. *ACS Applied Energy Materials*, **2020**, 3, 11992-11999	6.1	6
400	Microwave-Induced Structural Engineering and Pt Trapping in 6R-TaS for the Hydrogen Evolution Reaction. *Small*, **2020**, 16, e2003372	11	8
399	A High-Performance Magnesium Triflate-based Electrolyte for Rechargeable Magnesium Batteries. *Cell Reports Physical Science*, **2020**, 1, 100265	6.1	24

398	MXene-Based Flexible Supercapacitors: Influence of an Organic Ionic Conductor Electrolyte on the Performance. *ACS Applied Materials & Interfaces*, **2020**, 12, 53039-53048	9.5	21
397	Single-Step Synthesis of Platinoid-Decorated Phosphorene: Perspectives for Catalysis, Gas Sensing, and Energy Storage. *ACS Applied Materials & Interfaces*, **2020**, 12, 50516-50526	9.5	12
396	Liquid-Phase Exfoliated GeSe Nanoflakes for Photoelectrochemical-Type Photodetectors and Photoelectrochemical Water Splitting. *ACS Applied Materials & Interfaces*, **2020**, 12, 48598-48613	9.5	21
395	Integrated Biomonitoring Sensing with Wearable Asymmetric Supercapacitors Based on Ti3C2 MXene and 1T-Phase WS2 Nanosheets. *Advanced Functional Materials*, **2020**, 30, 2003673	15.6	34
394	Structural Manipulation of Layered TiS2 to TiS3 Nanobelts through Niobium Doping for High-Performance Supercapacitors. *ChemElectroChem*, **2020**, 7, 4985-4989	4.3	0
393	Light-Driven ZnO Brush-Shaped Self-Propelled Micromachines for Nitroaromatic Explosives Decomposition. *Small*, **2020**, 16, e1902944	11	19
392	Functional 2D Germanene Fluorescent Coating of Microrobots for Micromachines Multiplexing. *Small*, **2020**, 16, e1902365	11	21
391	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
390	Electrodeposited NiSe on a forest of carbon nanotubes as a free-standing electrode for hybrid supercapacitors and overall water splitting. *Journal of Colloid and Interface Science*, **2020**, 574, 300-311	9.3	50
389	Towards Antimonene and 2D Antimony Telluride through Electrochemical Exfoliation. *Chemistry - A European Journal*, **2020**, 26, 6583-6590	4.8	18
388	Synthesis Protocols of the Most Common Layered Carbide and Nitride MAX Phases. *Small Methods*, **2020**, 4, 1900780	12.8	27
387	Antimony Chalcogenide van der Waals Nanostructures for Energy Conversion and Storage. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 15790-15798	8.3	15
386	Coordination chemistry of 2D and layered gray arsenic: photochemical functionalization with chromium hexacarbonyl. *NPG Asia Materials*, **2019**, 11,	10.3	5
385	2H and 2H/1T-Transition Metal Dichalcogenide Films Prepared via Powderless Gas Deposition for the Hydrogen Evolution Reaction. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 16440-16449	8.3	6
384	MAX and MAB Phases: Two-Dimensional Layered Carbide and Boride Nanomaterials for Electrochemical Applications. *ACS Applied Nano Materials*, **2019**, 2, 6010-6021	5.6	25
383	MnPS3 shows anticancer behaviour towards lung cancer cells. *FlatChem*, **2019**, 18, 100134	5.1	4
382	Localized deoxygenation of graphene oxide foil by ion microbeam writing. *Vacuum*, **2019**, 163, 10-14	3.7	10
381	Mix-and-Read No-Wash Fluorescence DNA Sensing System Using Graphene Oxide: Analytical Performance of Fresh Versus Aged Dispersions. *ACS Omega*, **2019**, 4, 1611-1616	3.9	3

380	Layered and two dimensional metal oxides for electrochemical energy conversion. *Energy and Environmental Science*, **2019**, 12, 41-58	35.4	204
379	Proteinase-sculptured 3D-printed graphene/polylactic acid electrodes as potential biosensing platforms: towards enzymatic modeling of 3D-printed structures. *Nanoscale*, **2019**, 11, 12124-12131	7.7	49
378	Light-Driven Sandwich ZnO/TiO2/Pt Janus Micromotors: Schottky Barrier Suppression by Addition of TiO2 Atomic Interface Layers into ZnO/Pt Micromachines Leading to Enhanced Fuel-Free Propulsion. *Small Methods*, **2019**, 3, 1900258	12.8	10
377	Flexible Pt/Graphene Foil Containing only 6.6 wt % of Pt has a Comparable Hydrogen Evolution Reaction Performance to Platinum Metal. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11721-11727	8.3	6
376	Catalytic hydrogen evolution reaction on "metal-free" graphene: key role of metallic impurities. *Nanoscale*, **2019**, 11, 11083-11085	7.7	14
375	Edge vs. basal plane electrochemistry of layered pnictogens (As, Sb, Bi): Does edge always offer faster electron transfer?. *Applied Materials Today*, **2019**, 16, 179-184	6.6	5
374	Equipartition of Energy Defines the Size-Thickness Relationship in Liquid-Exfoliated Nanosheets. *ACS Nano*, **2019**, 13, 7050-7061	16.7	71
373	Selenium covalently modified graphene: towards gas sensing. *2D Materials*, **2019**, 6, 034006	5.9	0
372	Thiographene synthesized from fluorographene via xanthogenate with immobilized enzymes for environmental remediation. *Nanoscale*, **2019**, 11, 10695-10701	7.7	6
371	Electrochemistry of Layered Semiconducting AIIIBVI Chalcogenides: Indium Monochalcogenides (InS, InSe, InTe). *ChemCatChem*, **2019**, 11, 2634-2642	5.2	13
370	Layered Crystalline and Amorphous Platinum Disulfide (PtS): Contrasting Electrochemistry. *Chemistry - A European Journal*, **2019**, 25, 7330-7338	4.8	9
369	MoS versatile spray-coating of 3D electrodes for the hydrogen evolution reaction. *Nanoscale*, **2019**, 11, 9888-9895	7.7	17
368	Atomic Layer Deposition as a General Method Turns any 3D-Printed Electrode into a Desired Catalyst: Case Study in Photoelectrochemisty. *Advanced Energy Materials*, **2019**, 9, 1900994	21.8	21
367	Recyclable nanographene-based micromachines for the on-the-fly capture of nitroaromatic explosives. *Nanoscale*, **2019**, 11, 8825-8834	7.7	18
366	Chemistry of Layered Pnictogens: Phosphorus, Arsenic, Antimony, and Bismuth. *Angewandte Chemie*, **2019**, 131, 7631-7637	3.6	11
365	Effects of the ion bombardment on the structure and composition of GO and rGO foils. *Materials Chemistry and Physics*, **2019**, 232, 272-277	4.4	15
364	Chemistry of Layered Pnictogens: Phosphorus, Arsenic, Antimony, and Bismuth. *Angewandte Chemie - International Edition*, **2019**, 58, 7551-7557	16.4	38
363	Mildly oxidized SWCNT as new potential support membrane material for effective H2/CO2 separation. *Applied Materials Today*, **2019**, 15, 335-342	6.6	7

362	Fluorine saturation on thermally reduced graphene. *Applied Materials Today*, **2019**, 15, 343-349	6.6	7
361	Localized modification of graphene oxide properties by laser irradiation in vacuum. *Vacuum*, **2019**, 165, 134-138	3.7	15
360	Recoverable Bismuth-Based Microrobots: Capture, Transport, and On-Demand Release of Heavy Metals and an Anticancer Drug in Confined Spaces. *ACS Applied Materials & Interfaces*, **2019**, 11, 13359-13369	9.5	24
359	Catalytic and Light-Driven ZnO/Pt Janus Nano/Micromotors: Switching of Motion Mechanism via Interface Roughness and Defect Tailoring at the Nanoscale. *Advanced Functional Materials*, **2019**, 29, 1808678	15.6	52
358	The capacitance and electron transfer of 3D-printed graphene electrodes are dramatically influenced by the type of solvent used for pre-treatment. *Electrochemistry Communications*, **2019**, 102, 83-88	5.1	68
357	Shear-force exfoliation of indium and gallium chalcogenides for selective gas sensing applications. *Nanoscale*, **2019**, 11, 4310-4317	7.7	18
356	Chemical bonding and thermodynamic properties of gallium and indium monochalcogenides. *Journal of Chemical Thermodynamics*, **2019**, 128, 97-102	2.9	3
355	Supercapacitors in Motion: Autonomous Microswimmers for Natural-Resource Recovery. *Angewandte Chemie - International Edition*, **2019**, 58, 13340-13344	16.4	13
354	Supercapacitors in Motion: Autonomous Microswimmers for Natural-Resource Recovery. *Angewandte Chemie*, **2019**, 131, 13474-13478	3.6	1
353	Germanane synthesis with simultaneous covalent functionalization: towards highly functionalized fluorescent germananes. *Nanoscale*, **2019**, 11, 19327-19333	7.7	12
352	Cloisite Microrobots as Self-Propelling Cleaners for Fast and Efficient Removal of Improvised Organophosphate Nerve Agents. *ACS Applied Materials & Interfaces*, **2019**, 11, 31832-31843	9.5	12
351	2D Stacks of MXene Ti3C2 and 1T-Phase WS2 with Enhanced Capacitive Behavior. *ChemElectroChem*, **2019**, 6, 3982-3986	4.3	16
350	In Situ Doping of Black Phosphorus by High-Pressure Synthesis. *Inorganic Chemistry*, **2019**, 58, 10227-10238	5.1	12
349	Micromotors as "Motherships": A Concept for the Transport, Delivery, and Enzymatic Release of Molecular Cargo via Nanoparticles. *Langmuir*, **2019**, 35, 10618-10624	4	12
348	Beyond Graphene: Chemistry of Group 14 Graphene Analogues: Silicene, Germanene, and Stanene. *ACS Nano*, **2019**, 13, 8566-8576	16.7	56
347	Modification of MoS2 structure by means of high energy ions in connection to electrical properties and light element surface adsorption. *Surfaces and Interfaces*, **2019**, 17, 100357	4.1	7
346	Flexible freestanding MoS-based composite paper for energy conversion and storage. *Beilstein Journal of Nanotechnology*, **2019**, 10, 1488-1496	3	5
345	Synthesis, Composition, and Properties of Partially Oxidized Graphite Oxides. *Materials*, **2019**, 12,	3.5	7

344	Bipolar Electrochemistry as a Simple Synthetic Route toward Nanoscale Transition of Mo2B5 and W2B5 for Enhanced Hydrogen Evolution Reaction. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	3
343	Chalcogenide vacancies drive the electrocatalytic performance of rhenium dichalcogenides. *Nanoscale*, **2019**, 11, 14684-14690	7.7	6
342	Exfoliated transition metal dichalcogenide (MX2; M = Mo, W; X = S, Se, Te) nanosheets and their composites with polyaniline nanofibers for electrochemical capacitors. *Applied Materials Today*, **2019**, 16, 280-289	6.6	19
341	Binary Phosphorene Redox Behavior in Oxidoreductase Enzymatic Systems. *ACS Nano*, **2019**, 13, 13217-13224	13.7	11
340	Noncovalent Functionalization of Pnictogen Surfaces: From Small Molecules to 2D Heterostructures. *Small*, **2019**, 15, e1903495	11	7
339	Radioactive Uranium Preconcentration Self-Propelled Autonomous Microrobots Based on Metal-Organic Frameworks. *ACS Nano*, **2019**, 13, 11477-11487	16.7	50
338	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. *Angewandte Chemie*, **2019**, 131, 16669-16674	3.6	
337	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. *Angewandte Chemie - International Edition*, **2019**, 58, 16517-16522	16.4	10
336	A Metal-Doped Fungi-Based Biomaterial for Advanced Electrocatalysis. *Chemistry - A European Journal*, **2019**, 25, 3828-3834	4.8	2
335	Exfoliation of Calcium Germanide by Alkyl Halides. *Chemistry of Materials*, **2019**, 31, 10126-10134	9.6	12
334	Interaction of single- and double-stranded DNA with multilayer MXene by fluorescence spectroscopy and molecular dynamics simulations. *Chemical Science*, **2019**, 10, 10010-10017	9.4	29
333	Niobium disulphide (NbS2)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 25593-25608	13	30
332	The Structural and Compositional Changes of Graphene Oxide Induced by Irradiation With 500 keV Helium and Gallium Ions. *Physica Status Solidi (B): Basic Research*, **2019**, 256, 1800409	1.3	6
331	Pnictogen-Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. *Angewandte Chemie - International Edition*, **2019**, 58, 134-138	16.4	69
330	Exfoliated Layered Manganese Trichalcogenide Phosphite (MnPX3, X = S, Se) as Electrocatalytic van der Waals Materials for Hydrogen Evolution. *Advanced Functional Materials*, **2019**, 29, 1805975	15.6	47
329	Pnictogen-Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. *Angewandte Chemie*, **2019**, 131, 140-144	3.6	0
328	Tuning of electrocatalytic properties of MoS2 by chalcogenide ion implantation. *Applied Materials Today*, **2019**, 14, 216-223	6.6	11
327	Cytotoxicity of Shear Exfoliated Pnictogen (As, Sb, Bi) Nanosheets. *Chemistry - A European Journal*, **2019**, 25, 2242-2249	4.8	23

326	Ultrapure Graphene Is a Poor Electrocatalyst: Definitive Proof of the Key Role of Metallic Impurities in Graphene-Based Electrocatalysis. *ACS Nano*, **2019**, 13, 1574-1582	16.7	76
325	Hot Carrier and Surface Recombination Dynamics in Layered InSe Crystals. *Journal of Physical Chemistry Letters*, **2019**, 10, 493-499	6.4	15
324	Black Phosphorus Cytotoxicity Assessments Pitfalls: Advantages and Disadvantages of Metabolic and Morphological Assays. *Chemistry - A European Journal*, **2019**, 25, 349-360	4.8	12
323	Ultrafast Electrochemical Trigger Drug Delivery Mechanism for Nanographene Micromachines. *Advanced Functional Materials*, **2019**, 29, 1806696	15.6	62
322	Metal Phosphorous Trichalcogenides (MPCh): From Synthesis to Contemporary Energy Challenges. *Angewandte Chemie - International Edition*, **2019**, 58, 9326-9337	16.4	46
321	Metall-Phosphor-Trichalkogenide (MPCh3): von der Synthese zu aktuellen Energieanwendungen. *Angewandte Chemie*, **2019**, 131, 9426-9438	3.6	3
320	In vitro cytotoxicity of covalently protected layered molybdenum disulfide. *Applied Materials Today*, **2018**, 11, 200-206	6.6	15
319	The chemistry of CVD graphene. *Journal of Materials Chemistry C*, **2018**, 6, 6082-6101	7.1	70
318	3D-Printed Graphene/Polylactic Acid Electrodes Promise High Sensitivity in Electroanalysis. *Analytical Chemistry*, **2018**, 90, 5753-5757	7.8	141
317	Hydrogenation of Fluorographite and Fluorographene: An Easy Way to Produce Highly Hydrogenated Graphene. *Chemistry - A European Journal*, **2018**, 24, 8350-8360	4.8	4
316	Graphene oxide layers modified by irradiation with 1.2 MeV He+ ions. *Surface and Coatings Technology*, **2018**, 342, 220-225	4.4	15
315	Nonconductive layered hexagonal boron nitride exfoliation by bipolar electrochemistry. *Nanoscale*, **2018**, 10, 7298-7303	7.7	31
314	Cation-Controlled Electrocatalytical Activity of Transition-Metal Disulfides. *ACS Catalysis*, **2018**, 8, 2774-2781	2381	41
313	Black Phosphorus Synthesis Path Strongly Influences Its Delamination, Chemical Properties and Electrochemical Performance. *ACS Applied Energy Materials*, **2018**, 1, 503-509	6.1	19
312	A simplified protocol for the usage of new immuno-SERS probes for the detection of casein, collagens and ovalbumin in the cross-sections of artworks. *Analytical Methods*, **2018**, 10, 1054-1062	3.2	2
311	Morphological Effects and Stabilization of the Metallic 1T Phase in Layered V-, Nb-, and Ta-Doped WSe for Electrocatalysis. *Chemistry - A European Journal*, **2018**, 24, 3199-3208	4.8	26
310	Metallic impurities in black phosphorus nanoflakes prepared by different synthetic routes. *Nanoscale*, **2018**, 10, 1540-1546	7.7	23
309	MoS Nanoparticles as Electrocatalytic Labels in Magneto-Immunoassays. *ACS Applied Materials & Interfaces*, **2018**, 10, 16861-16866	9.5	10

308	Layered PtTe2 Matches Electrocatalytic Performance of Pt/C for Oxygen Reduction Reaction with Significantly Lower Toxicity. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7432-7441	8.3	38
307	Making Ultrafast High-Capacity Anodes for Lithium-Ion Batteries via Antimony Doping of Nanosized Tin Oxide/Graphene Composites. *Advanced Functional Materials*, **2018**, 28, 1706529	15.6	26
306	Chemistry of Graphene Derivatives: Synthesis, Applications, and Perspectives. *Chemistry - A European Journal*, **2018**, 24, 5992-6006	4.8	70
305	Cytotoxicity of Group 5 Transition Metal Ditellurides (MTe ; M=V, Nb, Ta). *Chemistry - A European Journal*, **2018**, 24, 206-211	4.8	25
304	Phase Transformation Induced Self-Healing Behavior of Al-Ag Alloy. *Materials*, **2018**, 11,	3.5	3
303	Fluorination of Black Phosphorus: Will Black Phosphorus Burn Down in the Elemental Fluorine?. *Advanced Functional Materials*, **2018**, 28, 1801438	15.6	23
302	Synthesis and properties of phosphorus and sulfur co-doped graphene. *New Journal of Chemistry*, **2018**, 42, 16093-16102	3.6	4
301	Unique wettability phenomenon of carbon-bonded alumina with advanced nanocoating. *Applied Materials Today*, **2018**, 13, 24-31	6.6	8
300	Products of Degradation of Black Phosphorus in Protic Solvents. *ACS Nano*, **2018**, 12, 8390-8396	16.7	45
299	Layered franckeite and teallite intrinsic heterostructures: shear exfoliation and electrocatalysis. *Journal of Materials Chemistry A*, **2018**, 6, 16590-16599	13	14
298	Fluorographene and Graphane as an Excellent Platform for Enzyme Biocatalysis. *Chemistry - A European Journal*, **2018**, 24, 16833-16839	4.8	5
297	Solution-Based Processing of Optoelectronically Active Indium Selenide. *Advanced Materials*, **2018**, 30, e1802990	24	59
296	Functional Protection of Exfoliated Black Phosphorus by Noncovalent Modification with Anthraquinone. *ACS Nano*, **2018**, 12, 5666-5673	16.7	63
295	Electrochemistry of layered metal diborides. *Nanoscale*, **2018**, 10, 11544-11552	7.7	29
294	TaS Nanofibers: Layered Trichalcogenide for High-Performance Electronic and Sensing Devices. *ACS Nano*, **2018**, 12, 464-473	16.7	20
293	One-Step Synthesis of B/N Co-doped Graphene as Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction: Synergistic Effect of Impurities. *Chemistry - A European Journal*, **2018**, 24, 928-936	4.8	21
292	WSe nanoparticles with enhanced hydrogen evolution reaction prepared by bipolar electrochemistry: application in competitive magneto-immunoassay. *Nanoscale*, **2018**, 10, 23149-23156	7.7	16
291	Reprint of Graphene oxide layers modified by irradiation with 1.2 MeV He+ ions. *Surface and Coatings Technology*, **2018**, 355, 301-306	4.4	1

290	3D Printed Graphene Electrodes' Electrochemical Activation. *ACS Applied Materials & Interfaces*, **2018**, 10, 40294-40301	9.5	126
289	Cytotoxicity of layered metal phosphorus chalcogenides (MPXY) nanoflakes; FePS3, CoPS3, NiPS3. *FlatChem*, **2018**, 12, 1-9	5.1	14
288	Fluorographenes for Energy and Sensing Application: The Amount of Fluorine Matters. *ACS Omega*, **2018**, 3, 17700-17706	3.9	5
287	Atomically Thin 2D-Arsenene by Liquid-Phased Exfoliation: Toward Selective Vapor Sensing. *Advanced Functional Materials*, **2018**, 29, 1807004	15.6	42
286	Metal-Free Visible-Light Photoactivated CN Bubble-Propelled Tubular Micromotors with Inherent Fluorescence and On/Off Capabilities. *ACS Nano*, **2018**, 12, 12482-12491	16.7	62
285	ZnO/ZnO/Pt Janus Micromotors Propulsion Mode Changes with Size and Interface Structure: Enhanced Nitroaromatic Explosives Degradation under Visible Light. *ACS Applied Materials & Interfaces*, **2018**, 10, 42688-42697	9.5	50
284	1T-Phase Tungsten Chalcogenides (WS2, WSe2, WTe2) Decorated with TiO2 Nanoplatelets with Enhanced Electron Transfer Activity for Biosensing Applications. *ACS Applied Nano Materials*, **2018**, 1, 7006-7015	5.6	20
283	Cytotoxicity of phosphorus allotropes (black, violet, red). *Applied Materials Today*, **2018**, 13, 310-319	6.6	17
282	Cooperative Multifunctional Self-Propelled Paramagnetic Microrobots with Chemical Handles for Cell Manipulation and Drug Delivery. *Advanced Functional Materials*, **2018**, 28, 1804343	15.6	48
281	Covalent Functionalization of Exfoliated Arsenic with Chlorocarbene. *Angewandte Chemie*, **2018**, 130, 15053-15056	3.6	4
280	Graphite oxide based targets applied in laser matter interaction. *EPJ Web of Conferences*, **2018**, 167, 02004	0.3	11
279	Laser modification of graphene oxide layers. *EPJ Web of Conferences*, **2018**, 167, 04010	0.3	5
278	Covalent Functionalization of Exfoliated Arsenic with Chlorocarbene. *Angewandte Chemie - International Edition*, **2018**, 57, 14837-14840	16.4	12
277	Triazine- and Heptazine-Based Carbon Nitrides: Toxicity. *ACS Applied Nano Materials*, **2018**, 1, 4442-4449	5.6	24
276	Graphene oxide layers modified by irradiation with 1.0 MeV Au+ ions. *Surface and Interface Analysis*, **2018**, 50, 1110-1115	1.5	8
275	A highly sensitive room temperature humidity sensor based on 2D-WS2 nanosheets. *FlatChem*, **2018**, 9, 21-26	5.1	17
274	Investigation of electrocatalytic activity on a N-doped reduced graphene oxide surface for the oxygen reduction reaction in an alkaline medium. *International Journal of Hydrogen Energy*, **2018**, 43, 12129-12139	6.7	24
273	MoSe Dispersed in Stabilizing Surfactant Media: Effect of the Surfactant Type and Concentration on Electron Transfer and Catalytic Properties. *ACS Applied Materials & Interfaces*, **2018**, 10, 17820-17826	9.5	16

272	Schwarzer Phosphor neu entdeckt: vom Volumenmaterial zu Monoschichten. *Angewandte Chemie*, **2017**, 129, 8164-8185	3.6	56
271	Black Phosphorus Rediscovered: From Bulk Material to Monolayers. *Angewandte Chemie - International Edition*, **2017**, 56, 8052-8072	16.4	315
270	Doping with Graphitic Nitrogen Triggers Ferromagnetism in Graphene. *Journal of the American Chemical Society*, **2017**, 139, 3171-3180	16.4	124
269	A study of the effect of sonication time on the catalytic performance of layered WS from various sources. *Physical Chemistry Chemical Physics*, **2017**, 19, 2768-2777	3.6	4
268	Structural and optical properties of vanadium ion-implanted GaN. *Nuclear Instruments & Methods in Physics Research B*, **2017**, 406, 53-57	1.2	2
267	Black phosphorus nanoparticles as a novel fluorescent sensing platform for nucleic acid detection. *Materials Chemistry Frontiers*, **2017**, 1, 1130-1136	7.8	65
266	Synthesis of Carboxylated-Graphenes by the Kolbe-Schmitt Process. *ACS Nano*, **2017**, 11, 1789-1797	16.7	34
265	Functional Nanosheet Synthons by Covalent Modification of Transition-Metal Dichalcogenides. *Chemistry of Materials*, **2017**, 29, 2066-2073	9.6	38
264	Investigation on the ability of heteroatom-doped graphene for biorecognition. *Nanoscale*, **2017**, 9, 3530-3536	7.7	7
263	The stopping power and energy straggling of light ions in graphene oxide foils. *Nuclear Instruments & Methods in Physics Research B*, **2017**, 406, 173-178	1.2	8
262	Concentration of Nitric Acid Strongly Influences Chemical Composition of Graphite Oxide. *Chemistry - A European Journal*, **2017**, 23, 6432-6440	4.8	14
261	3R phase of MoS and WS outperforms the corresponding 2H phase for hydrogen evolution. *Chemical Communications*, **2017**, 53, 3054-3057	5.8	115
260	2D Monoelemental Arsenene, Antimonene, and Bismuthene: Beyond Black Phosphorus. *Advanced Materials*, **2017**, 29, 1605299	24	467
259	Near-Stoichiometric Bulk Graphane from Halogenated Graphenes (X = Cl/Br/I) by the Birch Reduction for High Density Energy Storage. *Advanced Functional Materials*, **2017**, 27, 1605797	15.6	15
258	Group 6 Layered Transition-Metal Dichalcogenides in Lab-on-a-Chip Devices: 1T-Phase WS for Microfluidics Non-Enzymatic Detection of Hydrogen Peroxide. *Analytical Chemistry*, **2017**, 89, 4978-4985	7.8	27
257	2H-ℏT Phase Engineering of Layered Tantalum Disulfides in Electrocatalysis: Oxygen Reduction Reaction. *Chemistry - A European Journal*, **2017**, 23, 8082-8091	4.8	24
256	Facile synthesis of magnetic Co nanofoam by low-temperature thermal decomposition of Co glycerolate. *Micro and Nano Letters*, **2017**, 12, 278-280	0.9	6
255	The Covalent Functionalization of Layered Black Phosphorus by Nucleophilic Reagents. *Angewandte Chemie - International Edition*, **2017**, 56, 9891-9896	16.4	124

254	Towards stoichiometric analogues of graphene: graphane, fluorographene, graphol, graphene acid and others. *Chemical Society Reviews*, **2017**, 46, 4450-4463	58.5	58
253	Universal Method for Large-Scale Synthesis of Layered Transition Metal Dichalcogenides. *Chemistry - A European Journal*, **2017**, 23, 10177-10186	4.8	16
252	Planar Polyolefin Nanostripes: Perhydrogenated Graphene. *Chemistry - A European Journal*, **2017**, 23, 11961-11968	4.8	4
251	Two-Dimensional 1T-Phase Transition Metal Dichalcogenides as Nanocarriers To Enhance and Stabilize Enzyme Activity for Electrochemical Pesticide Detection. *ACS Nano*, **2017**, 11, 5774-5784	16.7	86
250	Nitrogen-doped graphene: effect of graphite oxide precursors and nitrogen content on the electrochemical sensing properties. *Physical Chemistry Chemical Physics*, **2017**, 19, 15914-15923	3.6	24
249	Selective Bromination of Graphene Oxide by the Hunsdiecker Reaction. *Chemistry - A European Journal*, **2017**, 23, 10473-10479	4.8	16
248	Low-Temperature PM IRRAS of a Monolayer on Au: Spectra of CDSH. *Langmuir*, **2017**, 33, 5613-5616	4	0
247	Thin, High-Flux, Self-Standing, Graphene Oxide Membranes for Efficient Hydrogen Separation from Gas Mixtures. *Chemistry - A European Journal*, **2017**, 23, 11416-11422	4.8	18
246	Graphene/Group 5 Transition Metal Dichalcogenide Composites for Electrochemical Applications. *Chemistry - A European Journal*, **2017**, 23, 10430-10437	4.8	8
245	Graphene oxide layers modified by light energetic ions. *Physical Chemistry Chemical Physics*, **2017**, 19, 10282-10291	3.6	34
244	Layered Metal Thiophosphite Materials: Magnetic, Electrochemical, and Electronic Properties. *ACS Applied Materials & Interfaces*, **2017**, 9, 12563-12573	9.5	126
243	Coke-derived graphene quantum dots as fluorescence nanoquencher in DNA detection. *Applied Materials Today*, **2017**, 7, 138-143	6.6	38
242	Efficient heat dissipation in AlGaN/GaN heterostructure grown on silver substrate. *Applied Materials Today*, **2017**, 7, 134-137	6.6	23
241	The Origin of MoS Significantly Influences Its Performance for the Hydrogen Evolution Reaction due to Differences in Phase Purity. *Chemistry - A European Journal*, **2017**, 23, 3169-3177	4.8	17
240	1T-Phase WS2 Protein-Based Biosensor. *Advanced Functional Materials*, **2017**, 27, 1604923	15.6	34
239	Tuning of graphene oxide composition by multiple oxidations for carbon dioxide storage and capture of toxic metals. *Journal of Materials Chemistry A*, **2017**, 5, 2739-2748	13	62
238	Ultrapure Molybdenum Disulfide Shows Enhanced Catalysis for Hydrogen Evolution over Impurities-Doped Counterpart. *ChemCatChem*, **2017**, 9, 1168-1171	5.2	14
237	Fast Synthesis of Highly Oxidized Graphene Oxide. *ChemistrySelect*, **2017**, 2, 9000-9006	1.8	15

236	The Role of the Metal Element in Layered Metal Phosphorus Triselenides upon Their Electrochemical Sensing and Energy Applications. *ACS Catalysis*, **2017**, 7, 8159-8170	13.1	50
235	Thermodynamic properties of misfit cobaltite [Bi2-xCa2O4][CoO2]1.7. *Thermochimica Acta*, **2017**, 656, 129-134	2.9	3
234	Black-phosphorus-enhanced bubble-propelled autonomous catalytic microjets. *Applied Materials Today*, **2017**, 9, 289-291	6.6	20
233	Thermal properties of graphite oxide, thermally reduced graphene and chemically reduced graphene **2017**,		4
232	Synergetic Metals on Carbocatalyst Shungite. *Chemistry - A European Journal*, **2017**, 23, 18232-18238	4.8	9
231	Black Phosphorus Nanoflakes/Polyaniline Hybrid Material for High-Performance Pseudocapacitors. *Journal of Physical Chemistry C*, **2017**, 121, 20532-20538	3.8	66
230	Layered Noble Metal Dichalcogenides: Tailoring Electrochemical and Catalytic Properties. *ACS Applied Materials & Interfaces*, **2017**, 9, 25587-25599	9.5	37
229	Structural and optical properties of Gd implanted GaN with various crystallographic orientations. *Thin Solid Films*, **2017**, 638, 63-72	2.2	11
228	Pnictogen (As, Sb, Bi) Nanosheets for Electrochemical Applications Are Produced by Shear Exfoliation Using Kitchen Blenders. *Angewandte Chemie - International Edition*, **2017**, 56, 14417-14422	16.4	170
227	Pnictogen (As, Sb, Bi) Nanosheets for Electrochemical Applications Are Produced by Shear Exfoliation Using Kitchen Blenders. *Angewandte Chemie*, **2017**, 129, 14609-14614	3.6	78
226	2H -h1T Phase Change in Direct Synthesis of WS Nanosheets via Solution-Based Electrochemical Exfoliation and Their Catalytic Properties. *ACS Applied Materials & Interfaces*, **2017**, 9, 26350-26356	9.5	46
225	Black Phosphorus Nanoparticles Potentiate the Anticancer Effect of Oxaliplatin in Ovarian Cancer Cell Line. *Advanced Functional Materials*, **2017**, 27, 1701955	15.6	45
224	Unconventionally Layered CoTe and NiTe as Electrocatalysts for Hydrogen Evolution. *Chemistry - A European Journal*, **2017**, 23, 11719-11726	4.8	50
223	Microwave irradiated N- and B,Cl-doped graphene: Oxidation method has strong influence on capacitive behavior. *Applied Materials Today*, **2017**, 9, 204-211	6.6	22
222	Introduction of sulfur to graphene oxide by Friedel-Crafts reaction. *FlatChem*, **2017**, 6, 28-36	5.1	5
221	1T-Phase Transition Metal Dichalcogenides (MoS, MoSe, WS, and WSe) with Fast Heterogeneous Electron Transfer: Application on Second-Generation Enzyme-Based Biosensor. *ACS Applied Materials & Interfaces*, **2017**, 9, 40697-40706	9.5	95
220	Surface properties of MoS probed by inverse gas chromatography and their impact on electrocatalytic properties. *Nanoscale*, **2017**, 9, 19236-19244	7.7	15
219	Innentitelbild: Pnictogen (As, Sb, Bi) Nanosheets for Electrochemical Applications Are Produced by Shear Exfoliation Using Kitchen Blenders (Angew. Chem. 46/2017). *Angewandte Chemie*, **2017**, 129, 14510-14510	3.6	1

218	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. *Angewandte Chemie*, **2017**, 129, 10579-10581	3.6	39
217	The Covalent Functionalization of Layered Black Phosphorus by Nucleophilic Reagents. *Angewandte Chemie*, **2017**, 129, 10023-10028	3.6	25
216	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. *Angewandte Chemie - International Edition*, **2017**, 56, 10443-10445	16.4	159
215	Layered Transition-Metal Ditellurides in Electrocatalytic Applications: Contrasting Properties. *ACS Catalysis*, **2017**, 7, 5706-5716	13.1	36
214	Cytotoxicity of Exfoliated Layered Vanadium Dichalcogenides. *Chemistry - A European Journal*, **2017** , 23, 684-690	4.8	34
213	Boron and Nitrogen Doped Graphene via Microwave Exfoliation for Simultaneous Electrochemical Detection of Ascorbic Acid, Dopamine and Uric Acid. *Electroanalysis*, **2017**, 29, 45-50	3	13
212	Graphitic carbon nitride: Effects of various precursors on the structural, morphological and electrochemical sensing properties. *Applied Materials Today*, **2017**, 8, 150-162	6.6	41
211	Fluorographene Modified by Grignard Reagents: A Broad Range of Functional Nanomaterials. *Chemistry - A European Journal*, **2017**, 23, 1956-1964	4.8	28
210	GO/2D WS2 Based Humidity Sensor. *Proceedings (mdpi)*, **2017**, 1, 469	0.3	2
209	Origin of exotic ferromagnetic behavior in exfoliated layered transition metal dichalcogenides MoS2 and WS2. *Nanoscale*, **2016**, 8, 1960-7	7.7	48
208	MoSe Nanolabels for Electrochemical Immunoassays. *Analytical Chemistry*, **2016**, 88, 12204-12209	7.8	28
207	Phosphorus and Halogen Co-Doped Graphene Materials and their Electrochemistry. *Chemistry - A European Journal*, **2016**, 22, 15444-15450	4.8	18
206	Valence and oxide impurities in MoS and WS dramatically change their electrocatalytic activity towards proton reduction. *Nanoscale*, **2016**, 8, 16752-16760	7.7	37
205	Synthesis of Graphene Oxide by Oxidation of Graphite with Ferrate(VI) Compounds: Myth or Reality?. *Angewandte Chemie*, **2016**, 128, 12144-12148	3.6	8
204	Synthesis of Graphene Oxide by Oxidation of Graphite with Ferrate(VI) Compounds: Myth or Reality?. *Angewandte Chemie - International Edition*, **2016**, 55, 11965-9	16.4	22
203	Synthesis procedure and type of graphite oxide strongly influence resulting graphene properties. *Applied Materials Today*, **2016**, 4, 45-53	6.6	70
202	Lipase enzymes on graphene oxide support for high-efficiency biocatalysis. *Applied Materials Today*, **2016**, 5, 200-208	6.6	24
201	Layered Post-Transition-Metal Dichalcogenides (X-M-M-X) and Their Properties. *Chemistry - A European Journal*, **2016**, 22, 18810-18816	4.8	17

200	Microwave Exfoliation of Graphite Oxides in HS Plasma for the Synthesis of Sulfur-Doped Graphenes as Oxygen Reduction Catalysts. *ACS Applied Materials & Interfaces*, **2016**, 8, 31849-31855	9.5	26
199	Catalytic properties of group 4 transition metal dichalcogenides (MX2; M = Ti, Zr, Hf; X = S, Se, Te). *Journal of Materials Chemistry A*, **2016**, 4, 18322-18334	13	65
198	Doped and undoped graphene platforms: the influence of structural properties on the detection of polyphenols. *Scientific Reports*, **2016**, 6, 20673	4.9	12
197	Air-stable superparamagnetic metal nanoparticles entrapped in graphene oxide matrix. *Nature Communications*, **2016**, 7, 12879	17.4	47
196	A New Member of the Graphene Family: Graphene Acid. *Chemistry - A European Journal*, **2016**, 22, 17416-17424	4.8	34
195	Lithium Exfoliated Vanadium Dichalcogenides (VS2, VSe2, VTe2) Exhibit Dramatically Different Properties from Their Bulk Counterparts. *Advanced Materials Interfaces*, **2016**, 3, 1600433	4.6	70
194	Simple Synthesis of Fluorinated Graphene: Thermal Exfoliation of Fluorographite. *Chemistry - A European Journal*, **2016**, 22, 17696-17703	4.8	20
193	Bipolar Electrochemical Synthesis of WS2 Nanoparticles and Their Application in Magneto-Immunosandwich Assay. *Advanced Functional Materials*, **2016**, 26, 4094-4098	15.6	35
192	Graphene–Amorphous Transition-Metal Chalcogenide (MoSx, WSx) Composites as Highly Efficient Hybrid Electrocatalysts for the Hydrogen Evolution Reaction. *ChemElectroChem*, **2016**, 3, 565-571	4.3	36
191	Ball-milled sulfur-doped graphene materials contain metallic impurities originating from ball-milling apparatus: their influence on the catalytic properties. *Physical Chemistry Chemical Physics*, **2016**, 18, 17875-80	3.6	31
190	Aromatic-Exfoliated Transition Metal Dichalcogenides: Implications for Inherent Electrochemistry and Hydrogen Evolution. *ACS Catalysis*, **2016**, 6, 4594-4607	13.1	71
189	Carboxylic Carbon Quantum Dots as a Fluorescent Sensing Platform for DNA Detection. *ACS Applied Materials & Interfaces*, **2016**, 8, 1951-7	9.5	216
188	Fine tuning of graphene properties by modification with aryl halogens. *Nanoscale*, **2016**, 8, 1493-502	7.7	19
187	Layered rhenium sulfide on free-standing three-dimensional electrodes is highly catalytic for the hydrogen evolution reaction: Experimental and theoretical study. *Electrochemistry Communications*, **2016**, 63, 39-43	5.1	43
186	Anti-MoS2 Nanostructures: Tl2S and Its Electrochemical and Electronic Properties. *ACS Nano*, **2016**, 10, 112-23	16.7	15
185	Nanosized graphane (C1H1.14)n by hydrogenation of carbon nanofibers by Birch reduction method. *RSC Advances*, **2016**, 6, 6475-6485	3.7	22
184	Synthesis of spherical amorphous selenium nano and microparticles with tunable sizes. *Micro and Nano Letters*, **2016**, 11, 91-93	0.9	13
183	Multifunctional electrocatalytic hybrid carbon nanocables with highly active edges on their walls. *Nanoscale*, **2016**, 8, 6700-11	7.7	10

182	Few-layer black phosphorus nanoparticles. *Chemical Communications*, **2016**, 52, 1563-6	5.8	103
181	Electrochemistry of layered GaSe and GeS: applications to ORR, OER and HER. *Physical Chemistry Chemical Physics*, **2016**, 18, 1699-711	3.6	64
180	Self-Propelled Supercapacitors for On-Demand Circuit Configuration Based on WS2 Nanoparticles Micromachines. *Advanced Functional Materials*, **2016**, 26, 6662-6667	15.6	57
179	Layered Black Phosphorus: Strongly Anisotropic Magnetic, Electronic, and Electron-Transfer Properties. *Angewandte Chemie*, **2016**, 128, 3443-3447	3.6	24
178	Layered Platinum Dichalcogenides (PtS2, PtSe2, and PtTe2) Electrocatalysis: Monotonic Dependence on the Chalcogen Size. *Advanced Functional Materials*, **2016**, 26, 4306-4318	15.6	175
177	Impact Electrochemistry: Detection of Graphene Nanosheets Labeled with Metal Nanoparticles through Oxygen Reduction Mediation. *ChemPhysChem*, **2016**, 17, 2096-9	3.2	16
176	Layered Black Phosphorus: Strongly Anisotropic Magnetic, Electronic, and Electron-Transfer Properties. *Angewandte Chemie - International Edition*, **2016**, 55, 3382-6	16.4	111
175	Contrasts between Mild and Harsh Oxidation of Carbon Nanotubes in terms of their Properties and Electrochemical Performance. *ChemElectroChem*, **2016**, 3, 1713-1719	4.3	9
174	Toward graphene chloride: chlorination of graphene and graphene oxide. *RSC Advances*, **2016**, 6, 66884-66892	3.7	39
173	Partially Hydrogenated Graphene Materials Exhibit High Electrocatalytic Activities Related to Unintentional Doping with Metallic Impurities. *Chemistry - A European Journal*, **2016**, 22, 8627-34	4.8	11
172	Sulfur Doping Induces Strong Ferromagnetic Ordering in Graphene: Effect of Concentration and Substitution Mechanism. *Advanced Materials*, **2016**, 28, 5045-53	24	67
171	Exfoliation of Layered Topological Insulators BiSe and BiTe via Electrochemistry. *ACS Nano*, **2016**, 10, 11442-11448	16.7	74
170	Direct electro-optical pumping for hybrid CdSe nanocrystal/III-nitride based nano-light-emitting diodes. *Applied Physics Letters*, **2016**, 108, 061107	3.4	36
169	Doped Graphene for DNA Analysis: the Electrochemical Signal is Strongly Influenced by the Kind of Dopant and the Nucleobase Structure. *Scientific Reports*, **2016**, 6, 33046	4.9	22
168	Ferromagnetism: Sulfur Doping Induces Strong Ferromagnetic Ordering in Graphene: Effect of Concentration and Substitution Mechanism (Adv. Mater. 25/2016). *Advanced Materials*, **2016**, 28, 5139	24	5
167	Hybrid optoelectronics based on a nanocrystal/III-N nano-LED platform **2016**,		5
166	InGaN mesoscopic structures for low energy consumption nano-opto-electronics **2016**,		1
165	The structural and optical properties of metal ion-implanted GaN. *Nuclear Instruments & Methods in Physics Research B*, **2016**, 371, 254-257	1.2	5

164	Graphane Nanostripes. *Angewandte Chemie*, **2016**, 128, 14171-14175	3.6	7
163	Graphane Nanostripes. *Angewandte Chemie - International Edition*, **2016**, 55, 13965-13969	16.4	10
162	Electrocatalysis of layered Group 5 metallic transition metal dichalcogenides (MX2, M = V, Nb, and Ta; X = S, Se, and Te). *Journal of Materials Chemistry A*, **2016**, 4, 14241-14253	13	159
161	Synthesis, structure, thermal, transport and magnetic properties of VN ceramics. *Ceramics International*, **2016**, 42, 18779-18784	5.1	13
160	Layered SnS versus SnS2: Valence and Structural Implications on Electrochemistry and Clean Energy Electrocatalysis. *Journal of Physical Chemistry C*, **2016**, 120, 24098-24111	3.8	61
159	Graphene Oxide Sorption Capacity toward Elements over the Whole Periodic Table: A Comparative Study. *Journal of Physical Chemistry C*, **2016**, 120, 24203-24212	3.8	44
158	Reducing emission of carcinogenic by-products in the production of thermally reduced graphene oxide. *Green Chemistry*, **2016**, 18, 6618-6629	10	6
157	Black Phosphorus Nanoparticle Labels for Immunoassays via Hydrogen Evolution Reaction Mediation. *Analytical Chemistry*, **2016**, 88, 10074-10079	7.8	118
156	Negative Electrocatalytic Effects of p-Doping Niobium and Tantalum on MoS2 and WS2 for the Hydrogen Evolution Reaction and Oxygen Reduction Reaction. *ACS Catalysis*, **2016**, 6, 5724-5734	13.1	145
155	Functionalization of Hydrogenated Graphene: Transition-Metal-Catalyzed Cross-Coupling Reactions of Allylic C□H Bonds. *Angewandte Chemie*, **2016**, 128, 10909-10912	3.6	11
154	Functionalization of Hydrogenated Graphene: Transition-Metal-Catalyzed Cross-Coupling Reactions of Allylic C-H Bonds. *Angewandte Chemie - International Edition*, **2016**, 55, 10751-4	16.4	19
153	MoS2 /WS2 -Graphene Composites through Thermal Decomposition of Tetrathiomolybdate/Tetrathiotungstate for Proton/Oxygen Electroreduction. *ChemPhysChem*, **2016**, 17, 2890-6	3.2	12
152	A limited anodic and cathodic potential window of MoS2: limitations in electrochemical applications. *Nanoscale*, **2015**, 7, 3126-9	7.7	30
151	Graphene oxide immobilized enzymes show high thermal and solvent stability. *Nanoscale*, **2015**, 7, 5852-8	7.7	167
150	Thermodynamic properties of tubular cobaltite Bi3.7Sr11.4Co8O29□ *Thermochimica Acta*, **2015**, 605, 22-27	2.9	5
149	Synthesis of strongly fluorescent graphene quantum dots by cage-opening buckminsterfullerene. *ACS Nano*, **2015**, 9, 2548-55	16.7	200
148	Impact Electrochemistry of Layered Transition Metal Dichalcogenides. *ACS Nano*, **2015**, 9, 8474-83	16.7	49
147	Tuning of fluorine content in graphene: towards large-scale production of stoichiometric fluorographene. *Nanoscale*, **2015**, 7, 13646-55	7.7	127

146	Use of deuterium labelling evidence of graphene hydrogenation by reduction of graphite oxide using aluminium in sodium hydroxide. *RSC Advances*, **2015**, 5, 18733-18739	3.7	13
145	Layered titanium diboride: towards exfoliation and electrochemical applications. *Nanoscale*, **2015**, 7, 12527-34	7.7	25
144	Insight into the mechanism of the thermal reduction of graphite oxide: deuterium-labeled graphite oxide is the key. *ACS Nano*, **2015**, 9, 5478-85	16.7	39
143	Sulfur poisoning of emergent and current electrocatalysts: vulnerability of MoS2, and direct correlation to Pt hydrogen evolution reaction kinetics. *Nanoscale*, **2015**, 7, 8879-83	7.7	11
142	MoxW1 S2 Solid Solutions as 3D Electrodes for Hydrogen Evolution Reaction. *Advanced Materials Interfaces*, **2015**, 2, 1500041	4.6	44
141	Highly selective removal of Ga3+ ions from Al3+/Ga3+ mixtures using graphite oxide. *Carbon*, **2015**, 89, 121-129	10.4	32
140	Preparation of amorphous antimicrobial selenium nanoparticles stabilized by odor suppressing surfactant polysorbate 20. *Materials Letters*, **2015**, 152, 207-209	3.3	31
139	Catalytic and charge transfer properties of transition metal dichalcogenides arising from electrochemical pretreatment. *ACS Nano*, **2015**, 9, 5164-79	16.7	158
138	The dopant type and amount governs the electrochemical performance of graphene platforms for the antioxidant activity quantification. *Nanoscale*, **2015**, 7, 9040-5	7.7	18
137	Hydroboration of graphene oxide: towards stoichiometric graphol and hydroxygraphane. *Chemistry - A European Journal*, **2015**, 21, 8130-6	4.8	11
136	Fluorographane (C1H(x)F(1-x))n: synthesis and properties. *Chemical Communications*, **2015**, 51, 5633-6	5.8	34
135	Impact electrochemistry of individual molybdenum nanoparticles. *Electrochemistry Communications*, **2015**, 56, 16-19	5.1	26
134	Layered transition metal oxyhydroxides as tri-functional electrocatalysts. *Journal of Materials Chemistry A*, **2015**, 3, 11920-11929	13	58
133	Iridium- and Osmium-decorated Reduced Graphenes as Promising Catalysts for Hydrogen Evolution. *ChemPhysChem*, **2015**, 16, 1898-905	3.2	24
132	2H -1T phase transition and hydrogen evolution activity of MoS2, MoSe2, WS2 and WSe2 strongly depends on the MX2 composition. *Chemical Communications*, **2015**, 51, 8450-3	5.8	450
131	High temperature superconducting materials as bi-functional catalysts for hydrogen evolution and oxygen reduction. *Journal of Materials Chemistry A*, **2015**, 3, 8346-8352	13	17
130	Transition metal dichalcogenides (MoS2, MoSe2, WS2 and WSe2) exfoliation technique has strong influence upon their capacitance. *Electrochemistry Communications*, **2015**, 56, 24-28	5.1	97
129	Geographical and geological origin of natural graphite heavily influence the electrical and electrochemical properties of chemically modified graphenes. *Chemistry - A European Journal*, **2015**, 21, 8435-40	4.8	11

128	Ferromagnetic and paramagnetic magnetization of implanted GaN:Ho,Tb,Sm,Tm films. *Journal of Applied Physics*, **2015**, 117, 17B907	2.5	5
127	Toxicity of layered semiconductor chalcogenides: beware of interferences. *RSC Advances*, **2015**, 5, 67485-67492	3.7	29
126	Separation of thorium ions from wolframite and scandium concentrates using graphene oxide. *Physical Chemistry Chemical Physics*, **2015**, 17, 25272-7	3.6	20
125	Mn doped GaN nanoparticles synthesized by rapid thermal treatment in ammonia. *Materials Chemistry and Physics*, **2015**, 164, 108-114	4.4	5
124	Electrochemical properties of layered SnO and PbO for energy applications. *RSC Advances*, **2015**, 5, 101949-101958	3.7	9
123	Simple synthesis of Cr2O3 nanoparticles with a tunable particle size. *Ceramics International*, **2015**, 41, 4644-4650	5.1	17
122	Voltammetry of Layered Black Phosphorus: Electrochemistry of Multilayer Phosphorene. *ChemElectroChem*, **2015**, 2, 324-327	4.3	83
121	Structure, oxygen non-stoichiometry and thermal properties of (Bi0.4Sr0.6)Sr2CoO5□ *Thermochimica Acta*, **2015**, 600, 89-94	2.9	8
120	Inherent electrochemistry of layered post-transition metal halides: the unexpected effect of potential cycling of PbI2. *Chemistry - A European Journal*, **2015**, 21, 3073-8	4.8	7
119	Phase diagram of the Sr□Co□ system. *Journal of the European Ceramic Society*, **2015**, 35, 935-940	6	22
118	Exfoliated transition metal dichalcogenides (MoS2, MoSe2, WS2, WSe2): An electrochemical impedance spectroscopic investigation. *Electrochemistry Communications*, **2015**, 50, 39-42	5.1	49
117	Synthesis of MnO, Mn2O3 and Mn3O4 nanocrystal clusters by thermal decomposition of manganese glycerolate. *Ceramics International*, **2015**, 41, 595-601	5.1	34
116	Towards graphene iodide: iodination of graphite oxide. *Nanoscale*, **2015**, 7, 261-70	7.7	45
115	Phase equilibria in the Zn□Mn□ system. *Journal of the European Ceramic Society*, **2015**, 35, 555-560	6	6
114	Lithium intercalation compound dramatically influences the electrochemical properties of exfoliated MoS2. *Small*, **2015**, 11, 605-12	11	212
113	Layered Black Phosphorus as a Selective Vapor Sensor. *Angewandte Chemie - International Edition*, **2015**, 54, 14317-20	16.4	162
112	Voltammetry of Layered Black Phosphorus: Electrochemistry of Multilayer Phosphorene. *ChemElectroChem*, **2015**, 2, 295-295	4.3	
111	Selective Nitrogen Functionalization of Graphene by Bucherer-Type Reaction. *Chemistry - A European Journal*, **2015**, 21, 7969-7969	4.8	1

110	Metallic 1T-WS2 for Selective Impedimetric Vapor Sensing. *Advanced Functional Materials*, **2015**, 25, 5611-5616	15	99
109	Selective nitrogen functionalization of graphene by Bucherer-type reaction. *Chemistry - A European Journal*, **2015**, 21, 8090-5	4.8	16
108	The Cytotoxicity of Layered Black Phosphorus. *Chemistry - A European Journal*, **2015**, 21, 13991-5	4.8	143
107	Mesomeric Effects of Graphene Modified with Diazonium Salts: Substituent Type and Position Influence its Properties. *Chemistry - A European Journal*, **2015**, 21, 17728-38	4.8	21
106	Transition Metal Oxides for the Oxygen Reduction Reaction: Influence of the Oxidation States of the Metal and its Position on the Periodic Table. *ChemPhysChem*, **2015**, 16, 3527-31	3.2	37
105	Fluorinated Nanocarbons Cytotoxicity. *Chemistry - A European Journal*, **2015**, 21, 13020-6	4.8	9
104	Pristine Basal- and Edge-Plane-Oriented Molybdenite MoS2 Exhibiting Highly Anisotropic Properties. *Chemistry - A European Journal*, **2015**, 21, 7170-8	4.8	106
103	Ternary Transition Metal Oxide Nanoparticles with Spinel Structure for the Oxygen Reduction Reaction. *ChemElectroChem*, **2015**, 2, 982-987	4.3	39
102	Effect of Electrolyte pH on the Inherent Electrochemistry of Layered Transition-Metal Dichalcogenides (MoS2, MoSe2, WS2, WSe2). *ChemElectroChem*, **2015**, 2, 1713-1718	4.3	12
101	Electrochemical Fluorographane: Hybrid Electrocatalysis of Biomarkers, Hydrogen Evolution, and Oxygen Reduction. *Chemistry - A European Journal*, **2015**, 21, 16474-8	4.8	14
100	Hydrogenated Graphenes by Birch Reduction: Influence of Electron and Proton Sources on Hydrogenation Efficiency, Magnetism, and Electrochemistry. *Chemistry - A European Journal*, **2015**, 21, 16828-38	4.8	21
99	Electrochemistry of Cd3As2: A 3D Analogue of Graphene. *ChemNanoMat*, **2015**, 1, 359-363	3.5	1
98	Transitional Metal/Chalcogen Dependant Interactions of Hairpin DNA with Transition Metal Dichalcogenides, MX2. *ChemPhysChem*, **2015**, 16, 2304-6	3.2	14
97	Definitive Insight into the Graphite Oxide Reduction Mechanism by Deuterium Labeling. *ChemPlusChem*, **2015**, 80, 1399-1407	2.8	18
96	Definitive proof of graphene hydrogenation by Clemmensen reduction: use of deuterium labeling. *Nanoscale*, **2015**, 7, 10535-43	7.7	14
95	Simultaneous self-exfoliation and autonomous motion of MoS2 particles in water. *Chemical Communications*, **2015**, 51, 9899-902	5.8	11
94	Enhancement of electrochemical and catalytic properties of MoS2 through ball-milling. *Electrochemistry Communications*, **2015**, 54, 36-40	5.1	36
93	Phase equilibria in the Bi-Sr-Co-O system: Towards the material tailoring of thermoelectric cobaltites. *Journal of the European Ceramic Society*, **2015**, 35, 3005-3012	6	5

92	Layered Black Phosphorus as a Selective Vapor Sensor. *Angewandte Chemie*, **2015**, 127, 14525-14528	3.6	32
91	Cytotoxicity of fluorographene. *RSC Advances*, **2015**, 5, 107158-107165	3.7	16
90	Enhanced colloidal stability of nanoscale zero valent iron particles in the presence of sodium silicate water glass. *Environmental Technology (United Kingdom)*, **2015**, 36, 358-65	2.6	8
89	Molybdenum Disulfide: Lithium Intercalation Compound Dramatically Influences the Electrochemical Properties of Exfoliated MoS2 (Small 5/2015). *Small*, **2015**, 11, 604-604	11	2
88	GaN:Co epitaxial layers grown by MOVPE. *Journal of Crystal Growth*, **2015**, 414, 62-68	1.6	1
87	Misfit-layered Bi1.85 Sr2 Co1.85 O7.7-δ for the hydrogen evolution reaction: beyond van der Waals heterostructures. *ChemPhysChem*, **2015**, 16, 769-74	3.2	9
86	Water-soluble highly fluorinated graphite oxide. *RSC Advances*, **2014**, 4, 1378-1387	3.7	58
85	Transition metal-depleted graphenes for electrochemical applications via reduction of CO_2 by lithium. *Small*, **2014**, 10, 1529-35	11	22
84	Layered transition metal dichalcogenides for electrochemical energy generation and storage. *Journal of Materials Chemistry A*, **2014**, 2, 8981-8987	13	477
83	Oxygen-Free Highly Conductive Graphene Papers. *Advanced Functional Materials*, **2014**, 24, 4878-4885	15.6	39
82	Cytotoxicity of halogenated graphenes. *Nanoscale*, **2014**, 6, 1173-80	7.7	32
81	Highly hydrogenated graphene via active hydrogen reduction of graphene oxide in the aqueous phase at room temperature. *Nanoscale*, **2014**, 6, 2153-60	7.7	45
80	Chemical preparation of graphene materials results in extensive unintentional doping with heteroatoms and metals. *Chemistry - A European Journal*, **2014**, 20, 15760-7	4.8	33
79	Carbon fragments are ripped off from graphite oxide sheets during their thermal reduction. *New Journal of Chemistry*, **2014**, 38, 5700-5705	3.6	32
78	Iridium-catalyst-based autonomous bubble-propelled graphene micromotors with ultralow catalyst loading. *Chemistry - A European Journal*, **2014**, 20, 14946-50	4.8	25
77	Precise tuning of the charge transfer kinetics and catalytic properties of MoS2 materials via electrochemical methods. *Chemistry - A European Journal*, **2014**, 20, 17426-32	4.8	65
76	Nitrogen doped graphene: influence of precursors and conditions of the synthesis. *Journal of Materials Chemistry C*, **2014**, 2, 2887-2893	7.1	54
75	Synthesis, magnetic and transport properties of oxygen-free CrN ceramics. *Journal of the European Ceramic Society*, **2014**, 34, 4131-4136	6	15

74	MoS□exhibits stronger toxicity with increased exfoliation. *Nanoscale*, **2014**, 6, 14412-8	7.7	132
73	Neutron diffraction as a precise and reliable method for obtaining structural properties of bulk quantities of graphene. *Nanoscale*, **2014**, 6, 13082-9	7.7	32
72	Towards Graphane Applications in Security: The Electrochemical Detection of Trinitrotoluene in Seawater on Hydrogenated Graphene. *Electroanalysis*, **2014**, 26, 62-68	3	28
71	Alternating Misfit Layered Transition/Alkaline Earth Metal Chalcogenide Ca3Co4O9 as a New Class of Chalcogenide Materials for Hydrogen Evolution. *Chemistry of Materials*, **2014**, 26, 4130-4136	9.6	60
70	Highly selective uptake of Ba2+ and Sr2+ ions by graphene oxide from mixtures of IIA elements. *RSC Advances*, **2014**, 4, 26673-26676	3.7	17
69	Towards graphene bromide: bromination of graphite oxide. *Nanoscale*, **2014**, 6, 6065-74	7.7	91
68	Synthetic routes contaminate graphene materials with a whole spectrum of unanticipated metallic elements. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13774-9	11.5	113
67	Uranium- and thorium-doped graphene for efficient oxygen and hydrogen peroxide reduction. *ACS Nano*, **2014**, 8, 7106-14	16.7	64
66	Heat capacity, enthalpy and entropy of Sr14Co11O33 and Sr6Co5O15. *Thermochimica Acta*, **2014**, 575, 167-172	2.9	15
65	Towards highly electrically conductive and thermally insulating graphene nanocomposites: Al2O3□graphene. *RSC Advances*, **2014**, 4, 7418-7424	3.7	44
64	Cytotoxicity profile of highly hydrogenated graphene. *Chemistry - A European Journal*, **2014**, 20, 6366-73	4.8	31
63	Magnetic control of electrochemical processes at electrode surface using iron-rich graphene materials with dual functionality. *Nanoscale*, **2014**, 6, 7391-6	7.7	11
62	Cytotoxicity of exfoliated transition-metal dichalcogenides (MoS2 , WS2 , and WSe2) is lower than that of graphene and its analogues. *Chemistry - A European Journal*, **2014**, 20, 9627-32	4.8	282
61	Capacitance of p- and n-doped graphenes is dominated by structural defects regardless of the dopant type. *ChemSusChem*, **2014**, 7, 1102-6	8.3	44
60	Fluorographenes via thermal exfoliation of graphite oxide in SF6, SF4 and MoF6 atmospheres. *Journal of Materials Chemistry C*, **2014**, 2, 5198-5207	7.1	27
59	3D-graphene for electrocatalysis of oxygen reduction reaction: Increasing number of layers increases the catalytic effect. *Electrochemistry Communications*, **2014**, 46, 148-151	5.1	30
58	Vacuum-assisted microwave reduction/exfoliation of graphite oxide and the influence of precursor graphite oxide. *Carbon*, **2014**, 77, 508-517	10.4	52
57	Electrochemistry of transition metal dichalcogenides: strong dependence on the metal-to-chalcogen composition and exfoliation method. *ACS Nano*, **2014**, 8, 12185-98	16.7	239

56	Graphene: Oxygen-Free Highly Conductive Graphene Papers (Adv. Funct. Mater. 31/2014). *Advanced Functional Materials*, **2014**, 24, 4877-4877	15.6	4
55	Synthesis of InN nanoparticles by rapid thermal ammonolysis. *Journal of Nanoparticle Research*, **2014**, 16, 1	2.3	2
54	CoO and Co3O4 nanoparticles with a tunable particle size. *Ceramics International*, **2014**, 40, 12591-12595	5.1	37
53	Concurrent phosphorus doping and reduction of graphene oxide. *Chemistry - A European Journal*, **2014**, 20, 4284-91	4.8	38
52	Boron-doped graphene and boron-doped diamond electrodes: detection of biomarkers and resistance to fouling. *Analyst, The*, **2013**, 138, 4885-91	5	53
51	Transition metal (Mn, Fe, Co, Ni)-doped graphene hybrids for electrocatalysis. *Chemistry - an Asian Journal*, **2013**, 8, 1295-300	4.5	72
50	Potassium assisted reduction and doping of graphene oxides: towards faster electron transfer kinetics. *RSC Advances*, **2013**, 3, 10900	3.7	7
49	Boron-Doped Graphene: Scalable and Tunable p-Type Carrier Concentration Doping. *Journal of Physical Chemistry C*, **2013**, 117, 23251-23257	3.8	97
48	Highly hydrogenated graphene through microwave exfoliation of graphite oxide in hydrogen plasma: towards electrochemical applications. *Chemistry - A European Journal*, **2013**, 19, 15583-92	4.8	43
47	Boron and nitrogen doping of graphene via thermal exfoliation of graphite oxide in a BF3 or NH3 atmosphere: contrasting properties. *Journal of Materials Chemistry A*, **2013**, 1, 13146	13	68
46	Unusual inherent electrochemistry of graphene oxides prepared using permanganate oxidants. *Chemistry - A European Journal*, **2013**, 19, 12673-83	4.8	80
45	Carcinogenic organic residual compounds readsorbed on thermally reduced graphene materials are released at low temperature. *Chemistry - A European Journal*, **2013**, 19, 14446-50	4.8	6
44	Rapid thermal synthesis of GaN nanocrystals and nanodisks. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	4
43	Preparation and luminescent properties of cubic potassium-erbium fluoride nanoparticles. *Journal of Fluorine Chemistry*, **2013**, 156, 363-366	2.1	5
42	Nano-crystals of various lanthanide fluorides prepared using the ionic liquid bmimPF6. *Journal of Fluorine Chemistry*, **2013**, 149, 13-17	2.1	12
41	Biomarkers Detection on Hydrogenated Graphene Surfaces: Towards Applications of Graphane in Biosensing. *Electroanalysis*, **2013**, 25, 703-705	3	26
40	Large-scale quantification of CVD graphene surface coverage. *Nanoscale*, **2013**, 5, 2379-87	7.7	45
39	Purification of carbon nanotubes by high temperature chlorine gas treatment. *Physical Chemistry Chemical Physics*, **2013**, 15, 5615-9	3.6	24

38	Searching for magnetism in hydrogenated graphene: using highly hydrogenated graphene prepared via Birch reduction of graphite oxides. *ACS Nano*, **2013**, 7, 5930-9	16.7	131
37	Complex organic molecules are released during thermal reduction of graphite oxides. *Physical Chemistry Chemical Physics*, **2013**, 15, 9257-64	3.6	28
36	Sulfur-doped graphene via thermal exfoliation of graphite oxide in H2S, SO2, or CS2 gas. *ACS Nano*, **2013**, 7, 5262-72	16.7	284
35	Halogenation of graphene with chlorine, bromine, or iodine by exfoliation in a halogen atmosphere. *Chemistry - A European Journal*, **2013**, 19, 2655-62	4.8	131
34	Graphene materials preparation methods have dramatic influence upon their capacitance. *Electrochemistry Communications*, **2012**, 14, 5-8	5.1	88
33	Metallic Impurities in Graphenes Prepared from Graphite Can Dramatically Influence Their Properties. *Angewandte Chemie*, **2012**, 124, 515-518	3.6	19
32	Metallic impurities in graphenes prepared from graphite can dramatically influence their properties. *Angewandte Chemie - International Edition*, **2012**, 51, 500-3	16.4	149
31	High-pressure hydrogenation of graphene: towards graphane. *Nanoscale*, **2012**, 4, 7006-11	7.7	71
30	Graphite oxides: effects of permanganate and chlorate oxidants on the oxygen composition. *Chemistry - A European Journal*, **2012**, 18, 13453-9	4.8	138
29	Graphane electrochemistry: Electron transfer at hydrogenated graphenes. *Electrochemistry Communications*, **2012**, 25, 58-61	5.1	17
28	Inherently electroactive graphene oxide nanoplatelets as labels for single nucleotide polymorphism detection. *ACS Nano*, **2012**, 6, 8546-51	16.7	105
27	Influence of parent graphite particle size on the electrochemistry of thermally reduced graphene oxide. *Physical Chemistry Chemical Physics*, **2012**, 14, 12794-9	3.6	22
26	Residual strain in recessed AlGaN/GaN heterostructure field-effect transistors evaluated by micro photoluminescence measurements. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 911-914		4
25	Graphenes prepared by Staudenmaier, Hofmann and Hummers methods with consequent thermal exfoliation exhibit very different electrochemical properties. *Nanoscale*, **2012**, 4, 3515-22	7.7	303
24	Chemically reduced graphene contains inherent metallic impurities present in parent natural and synthetic graphite. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 12899-904	11.5	173
23	Noble metal (Pd, Ru, Rh, Pt, Au, Ag) doped graphene hybrids for electrocatalysis. *Nanoscale*, **2012**, 4, 5002-8	7.7	190
22	Graphene sheet orientation of parent material exhibits dramatic influence on graphene properties. *Chemistry - an Asian Journal*, **2012**, 7, 2367-72	4.5	23
21	Chemically-modified graphenes for oxidation of DNA bases: analytical parameters. *Analyst, The*, **2011**, 136, 4738-44	5	38

20	Electrochemistry at chemically modified graphenes. *Chemistry - A European Journal*, **2011**, 17, 10763-70	4.8	272
19	Influence of different SiC surface treatments performed prior to Ni ohmic contacts formation. *Microelectronic Engineering*, **2011**, 88, 553-556	2.5	4
18	Flux growth of ZnO crystals doped by transition metals. *Journal of Crystal Growth*, **2011**, 314, 123-128	1.6	8
17	Oxidized Al Film as an Insulation Layer in AlGaN/GaN Metal–Oxide–Semiconductor Heterostructure Field Effect Transistors. *Japanese Journal of Applied Physics*, **2010**, 49, 046504	1.4	2
16	Femtosecond and highly sensitive GaAs metal–semiconductor–metal photodetectors grown on aluminum mirrors/pseudo-substrates. *Semiconductor Science and Technology*, **2010**, 25, 075001	1.8	10
15	In-situ doping and implantation of GaN layers with Mn. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, S646-S649		4
14	Growth and characterization of GaN:Mn layers by MOVPE. *Journal of Crystal Growth*, **2008**, 310, 5025-5027	1.6	6
13	Synthesis of Er-complexes for photonic applications. *Journal of Physics and Chemistry of Solids*, **2007**, 68, 1272-1275	3.9	
12	Investigation of AlN growth on sapphire substrates in a horizontal MOVPE reactor. *Journal of Physics and Chemistry of Solids*, **2007**, 68, 1131-1134	3.9	1
11	Porous glass doping by Er3+ for photonics applications. *Journal of Materials Science: Materials in Electronics*, **2007**, 18, 379-382	2.1	
10	Growth and properties of GaN and AlN layers on silver substrates. *Applied Physics Letters*, **2005**, 87, 212109	3.4	15
9	Simultaneous microwave-assisted reduction and B/N co-doping of graphene oxide for selective recognition of VOCs. *Journal of Materials Chemistry C*,	7.1	1
8	Prospective Advances in MXene Inks: Screen Printable Sediments for Flexible Micro-Supercapacitor Applications. *Journal of Materials Chemistry A*,	13	6
7	Multifunctional Photoelectroactive Platform for CO2 Reduction toward C2+ Products-Programmable Selectivity with a Bioinspired Polymer Coating. *ACS Catalysis*,1558-1571	13.1	3
6	Picric acid violet light assisted photodegradation mediated by germanene-based materials. *Bulletin of the Chemical Society of Japan*,	5.1	3
5	Self-reconstruction mediates isolated Pt tailored nanoframes for highly efficient catalysis. *Journal of Materials Chemistry A*,	13	1
4	Layered ZnIn2S4 Single Crystals for Ultrasensitive and Wearable Photodetectors. *Advanced Optical Materials*,2100845	8.1	4
3	Overcoming the Challenges of Freestanding Tin Oxide-Based Composite Anodes to Achieve High Capacity and Increased Cycling Stability. *Advanced Functional Materials*,2106373	15.6	0

2	2D Heterostructures for Highly Efficient Photodetectors: From Advanced Synthesis to Characterizations, Mechanisms, and Device Applications. *Advanced Photonics Research*,2100342	1.9	3
1	Co-doping graphene with B and N heteroatoms for application in energy conversion and storage devices. *ChemNanoMat*,	3.5	1