Zdenek Sofer

List of Publications by Citations

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	Layered transition metal dichalcogenides for electrochemical energy generation and storage. *Journal of Materials Chemistry A*, **2014**, 2, 8981-8987	13	477
504	2D Monoelemental Arsenene, Antimonene, and Bismuthene: Beyond Black Phosphorus. *Advanced Materials*, **2017**, 29, 1605299	24	467
503	2H -H1 T 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
502	Black Phosphorus Rediscovered: From Bulk Material to Monolayers. *Angewandte Chemie - International Edition*, **2017**, 56, 8052-8072	16.4	315
501	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
500	Sulfur-doped graphene via thermal exfoliation of graphite oxide in H2S, SO2, or CS2 gas. *ACS Nano*, **2013**, 7, 5262-72	16.7	284
499	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
498	Electrochemistry at chemically modified graphenes. *Chemistry - A European Journal*, **2011**, 17, 10763-70	4.8	272
497	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
496	Carboxylic Carbon Quantum Dots as a Fluorescent Sensing Platform for DNA Detection. *ACS Applied Materials & Interfaces*, **2016**, 8, 1951-7	9.5	216
495	Lithium intercalation compound dramatically influences the electrochemical properties of exfoliated MoS2. *Small*, **2015**, 11, 605-12	11	212
494	Layered and two dimensional metal oxides for electrochemical energy conversion. *Energy and Environmental Science*, **2019**, 12, 41-58	35.4	204
493	Synthesis of strongly fluorescent graphene quantum dots by cage-opening buckminsterfullerene. *ACS Nano*, **2015**, 9, 2548-55	16.7	200
492	Noble metal (Pd, Ru, Rh, Pt, Au, Ag) doped graphene hybrids for electrocatalysis. *Nanoscale*, **2012**, 4, 5002-8	7.7	190
491	Layered Platinum Dichalcogenides (PtS2, PtSe2, and PtTe2) Electrocatalysis: Monotonic Dependence on the Chalcogen Size. *Advanced Functional Materials*, **2016**, 26, 4306-4318	15.6	175
490	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
489	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

488	Graphene oxide immobilized enzymes show high thermal and solvent stability. *Nanoscale*, **2015**, 7, 5852-8	7.7	167
487	Layered Black Phosphorus as a Selective Vapor Sensor. *Angewandte Chemie - International Edition*, **2015**, 54, 14317-20	16.4	162
486	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. *Angewandte Chemie - International Edition*, **2017**, 56, 10443-10445	16.4	159
485	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
484	Catalytic and charge transfer properties of transition metal dichalcogenides arising from electrochemical pretreatment. *ACS Nano*, **2015**, 9, 5164-79	16.7	158
483	Metallic impurities in graphenes prepared from graphite can dramatically influence their properties. *Angewandte Chemie - International Edition*, **2012**, 51, 500-3	16.4	149
482	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
481	The Cytotoxicity of Layered Black Phosphorus. *Chemistry - A European Journal*, **2015**, 21, 13991-5	4.8	143
480	3D-Printed Graphene/Polylactic Acid Electrodes Promise High Sensitivity in Electroanalysis. *Analytical Chemistry*, **2018**, 90, 5753-5757	7.8	141
479	Graphite oxides: effects of permanganate and chlorate oxidants on the oxygen composition. *Chemistry - A European Journal*, **2012**, 18, 13453-9	4.8	138
478	MoS_2 exhibits stronger toxicity with increased exfoliation. *Nanoscale*, **2014**, 6, 14412-8	7.7	132
477	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
476	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
475	Tuning of fluorine content in graphene: towards large-scale production of stoichiometric fluorographene. *Nanoscale*, **2015**, 7, 13646-55	7.7	127
474	Layered Metal Thiophosphite Materials: Magnetic, Electrochemical, and Electronic Properties. *ACS Applied Materials & Interfaces*, **2017**, 9, 12563-12573	9.5	126
473	3D Printed Graphene Electrodes' Electrochemical Activation. *ACS Applied Materials & Interfaces* , **2018**, 10, 40294-40301	9.5	126
472	Doping with Graphitic Nitrogen Triggers Ferromagnetism in Graphene. *Journal of the American Chemical Society*, **2017**, 139, 3171-3180	16.4	124
471	The Covalent Functionalization of Layered Black Phosphorus by Nucleophilic Reagents. *Angewandte Chemie - International Edition*, **2017**, 56, 9891-9896	16.4	124

470	Black Phosphorus Nanoparticle Labels for Immunoassays via Hydrogen Evolution Reaction Mediation. *Analytical Chemistry*, **2016**, 88, 10074-10079	7.8	118
469	3R phase of MoS and WS outperforms the corresponding 2H phase for hydrogen evolution. *Chemical Communications*, **2017**, 53, 3054-3057	5.8	115
468	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
467	Layered Black Phosphorus: Strongly Anisotropic Magnetic, Electronic, and Electron-Transfer Properties. *Angewandte Chemie - International Edition*, **2016**, 55, 3382-6	16.4	111
466	Pristine Basal- and Edge-Plane-Oriented Molybdenite MoS2 Exhibiting Highly Anisotropic Properties. *Chemistry - A European Journal*, **2015**, 21, 7170-8	4.8	106
465	Inherently electroactive graphene oxide nanoplatelets as labels for single nucleotide polymorphism detection. *ACS Nano*, **2012**, 6, 8546-51	16.7	105
464	Few-layer black phosphorus nanoparticles. *Chemical Communications*, **2016**, 52, 1563-6	5.8	103
463	Metallic 1T-WS2 for Selective Impedimetric Vapor Sensing. *Advanced Functional Materials*, **2015**, 25, 5611-5616	15.6	99
462	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
461	Boron-Doped Graphene: Scalable and Tunable p-Type Carrier Concentration Doping. *Journal of Physical Chemistry C*, **2013**, 117, 23251-23257	3.8	97
460	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
459	Towards graphene bromide: bromination of graphite oxide. *Nanoscale*, **2014**, 6, 6065-74	7.7	91
458	Will Any Crap We Put into Graphene Increase Its Electrocatalytic Effect?. *ACS Nano*, **2020**, 14, 21-25	16.7	88
457	Graphene materials preparation methods have dramatic influence upon their capacitance. *Electrochemistry Communications*, **2012**, 14, 5-8	5.1	88
456	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
455	Voltammetry of Layered Black Phosphorus: Electrochemistry of Multilayer Phosphorene. *ChemElectroChem*, **2015**, 2, 324-327	4.3	83
454	Unusual inherent electrochemistry of graphene oxides prepared using permanganate oxidants. *Chemistry - A European Journal*, **2013**, 19, 12673-83	4.8	80
453	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

452	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
451	MXene Titanium Carbide-based Biosensor: Strong Dependence of Exfoliation Method on Performance. *Analytical Chemistry*, **2020**, 92, 2452-2459	7.8	75
450	Exfoliation of Layered Topological Insulators BiSe and BiTe via Electrochemistry. *ACS Nano*, **2016**, 10, 11442-11448	16.7	74
449	Transition metal (Mn, Fe, Co, Ni)-doped graphene hybrids for electrocatalysis. *Chemistry - an Asian Journal*, **2013**, 8, 1295-300	4.5	72
448	Equipartition of Energy Defines the Size-Thickness Relationship in Liquid-Exfoliated Nanosheets. *ACS Nano*, **2019**, 13, 7050-7061	16.7	71
447	Aromatic-Exfoliated Transition Metal Dichalcogenides: Implications for Inherent Electrochemistry and Hydrogen Evolution. *ACS Catalysis*, **2016**, 6, 4594-4607	13.1	71
446	High-pressure hydrogenation of graphene: towards graphane. *Nanoscale*, **2012**, 4, 7006-11	7.7	71
445	The chemistry of CVD graphene. *Journal of Materials Chemistry C*, **2018**, 6, 6082-6101	7.1	70
444	Chemistry of Graphene Derivatives: Synthesis, Applications, and Perspectives. *Chemistry - A European Journal*, **2018**, 24, 5992-6006	4.8	70
443	Synthesis procedure and type of graphite oxide strongly influence resulting graphene properties. *Applied Materials Today*, **2016**, 4, 45-53	6.6	70
442	Lithium Exfoliated Vanadium Dichalcogenides (VS2, VSe2, VTe2) Exhibit Dramatically Different Properties from Their Bulk Counterparts. *Advanced Materials Interfaces*, **2016**, 3, 1600433	4.6	70
441	Pnictogen-Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. *Angewandte Chemie - International Edition*, **2019**, 58, 134-138	16.4	69
440	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
439	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
438	Sulfur Doping Induces Strong Ferromagnetic Ordering in Graphene: Effect of Concentration and Substitution Mechanism. *Advanced Materials*, **2016**, 28, 5045-53	24	67
437	Black Phosphorus Nanoflakes/Polyaniline Hybrid Material for High-Performance Pseudocapacitors. *Journal of Physical Chemistry C*, **2017**, 121, 20532-20538	3.8	66
436	Black phosphorus nanoparticles as a novel fluorescent sensing platform for nucleic acid detection. *Materials Chemistry Frontiers*, **2017**, 1, 1130-1136	7.8	65
435	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

434	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
433	Electrochemistry of layered GaSe and GeS: applications to ORR, OER and HER. *Physical Chemistry Chemical Physics*, **2016**, 18, 1699-711	3.6	64
432	Uranium- and thorium-doped graphene for efficient oxygen and hydrogen peroxide reduction. *ACS Nano*, **2014**, 8, 7106-14	16.7	64
431	Functional Protection of Exfoliated Black Phosphorus by Noncovalent Modification with Anthraquinone. *ACS Nano*, **2018**, 12, 5666-5673	16.7	63
430	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
429	Ultrafast Electrochemical Trigger Drug Delivery Mechanism for Nanographene Micromachines. *Advanced Functional Materials*, **2019**, 29, 1806696	15.6	62
428	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
427	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
426	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
425	Solution-Based Processing of Optoelectronically Active Indium Selenide. *Advanced Materials*, **2018**, 30, e1802990	24	59
424	Towards stoichiometric analogues of graphene: graphane, fluorographene, graphol, graphene acid and others. *Chemical Society Reviews*, **2017**, 46, 4450-4463	58.5	58
423	Layered transition metal oxyhydroxides as tri-functional electrocatalysts. *Journal of Materials Chemistry A*, **2015**, 3, 11920-11929	13	58
422	Water-soluble highly fluorinated graphite oxide. *RSC Advances*, **2014**, 4, 1378-1387	3.7	58
421	Self-Propelled Supercapacitors for On-Demand Circuit Configuration Based on WS2 Nanoparticles Micromachines. *Advanced Functional Materials*, **2016**, 26, 6662-6667	15.6	57
420	Schwarzer Phosphor neu entdeckt: vom Volumenmaterial zu Monoschichten. *Angewandte Chemie*, **2017**, 129, 8164-8185	3.6	56
419	Beyond Graphene: Chemistry of Group 14 Graphene Analogues: Silicene, Germanene, and Stanene. *ACS Nano*, **2019**, 13, 8566-8576	16.7	56
418	Nitrogen doped graphene: influence of precursors and conditions of the synthesis. *Journal of Materials Chemistry C*, **2014**, 2, 2887-2893	7.1	54
417	Boron-doped graphene and boron-doped diamond electrodes: detection of biomarkers and resistance to fouling. *Analyst, The*, **2013**, 138, 4885-91	5	53

416	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
415	Vacuum-assisted microwave reduction/exfoliation of graphite oxide and the influence of precursor graphite oxide. *Carbon*, **2014**, 77, 508-517	10.4	52
414	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
413	Radioactive Uranium Preconcentration Self-Propelled Autonomous Microrobots Based on Metal-Organic Frameworks. *ACS Nano*, **2019**, 13, 11477-11487	16.7	50
412	Unconventionally Layered CoTe and NiTe as Electrocatalysts for Hydrogen Evolution. *Chemistry - A European Journal*, **2017**, 23, 11719-11726	4.8	50
411	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
410	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
409	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
408	Impact Electrochemistry of Layered Transition Metal Dichalcogenides. *ACS Nano*, **2015**, 9, 8474-83	16.7	49
407	Exfoliated transition metal dichalcogenides (MoS2, MoSe2, WS2, WSe2): An electrochemical impedance spectroscopic investigation. *Electrochemistry Communications*, **2015**, 50, 39-42	5.1	49
406	Recent Developments on the Single Atom Supported at 2D Materials Beyond Graphene as Catalysts. *ACS Catalysis*, **2020**, 10, 9634-9648	13.1	49
405	Origin of exotic ferromagnetic behavior in exfoliated layered transition metal dichalcogenides MoS2 and WS2. *Nanoscale*, **2016**, 8, 1960-7	7.7	48
404	Cooperative Multifunctional Self-Propelled Paramagnetic Microrobots with Chemical Handles for Cell Manipulation and Drug Delivery. *Advanced Functional Materials*, **2018**, 28, 1804343	15.6	48
403	Air-stable superparamagnetic metal nanoparticles entrapped in graphene oxide matrix. *Nature Communications*, **2016**, 7, 12879	17.4	47
402	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
401	Solution-Processed GaSe Nanoflake-Based Films for Photoelectrochemical Water Splitting and Photoelectrochemical-Type Photodetectors. *Advanced Functional Materials*, **2020**, 30, 1909572	15.6	46
400	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
399	Metal Phosphorous Trichalcogenides (MPCh): From Synthesis to Contemporary Energy Challenges. *Angewandte Chemie - International Edition*, **2019**, 58, 9326-9337	16.4	46

398	Towards graphene iodide: iodination of graphite oxide. *Nanoscale*, **2015**, 7, 261-70	7.7	45
397	Products of Degradation of Black Phosphorus in Protic Solvents. *ACS Nano*, **2018**, 12, 8390-8396	16.7	45
396	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
395	Black Phosphorus Nanoparticles Potentiate the Anticancer Effect of Oxaliplatin in Ovarian Cancer Cell Line. *Advanced Functional Materials*, **2017**, 27, 1701955	15.6	45
394	Large-scale quantification of CVD graphene surface coverage. *Nanoscale*, **2013**, 5, 2379-87	7.7	45
393	MoxW1□S2 Solid Solutions as 3D Electrodes for Hydrogen Evolution Reaction. *Advanced Materials Interfaces*, **2015**, 2, 1500041	4.6	44
392	Towards highly electrically conductive and thermally insulating graphene nanocomposites: Al2O3□graphene. *RSC Advances*, **2014**, 4, 7418-7424	3.7	44
391	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
390	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
389	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
388	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
387	Atomically Thin 2D-Arsenene by Liquid-Phased Exfoliation: Toward Selective Vapor Sensing. *Advanced Functional Materials*, **2018**, 29, 1807004	15.6	42
386	Cation-Controlled Electrocatalytical Activity of Transition-Metal Disulfides. *ACS Catalysis*, **2018**, 8, 2774-2781	2381	41
385	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
384	Graphene-Supported 2D transition metal dichalcogenide van der waals heterostructures. *Applied Materials Today*, **2020**, 19, 100600	6.6	40
383	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
382	Oxygen-Free Highly Conductive Graphene Papers. *Advanced Functional Materials*, **2014**, 24, 4878-4885	15.6	39
381	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. *Angewandte Chemie*, **2017**, 129, 10579-10581	3.6	39

380	Ternary Transition Metal Oxide Nanoparticles with Spinel Structure for the Oxygen Reduction Reaction. *ChemElectroChem*, **2015**, 2, 982-987	4.3	39
379	Toward graphene chloride: chlorination of graphene and graphene oxide. *RSC Advances*, **2016**, 6, 66884-66892	3.7	39
378	Functional Nanosheet Synthons by Covalent Modification of Transition-Metal Dichalcogenides. *Chemistry of Materials*, **2017**, 29, 2066-2073	9.6	38
377	Coke-derived graphene quantum dots as fluorescence nanoquencher in DNA detection. *Applied Materials Today*, **2017**, 7, 138-143	6.6	38
376	Chemistry of Layered Pnictogens: Phosphorus, Arsenic, Antimony, and Bismuth. *Angewandte Chemie - International Edition*, **2019**, 58, 7551-7557	16.4	38
375	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
374	Concurrent phosphorus doping and reduction of graphene oxide. *Chemistry - A European Journal*, **2014**, 20, 4284-91	4.8	38
373	Chemically-modified graphenes for oxidation of DNA bases: analytical parameters. *Analyst, The*, **2011**, 136, 4738-44	5	38
372	Valence and oxide impurities in MoS and WS dramatically change their electrocatalytic activity towards proton reduction. *Nanoscale*, **2016**, 8, 16752-16760	7.7	37
371	Layered Noble Metal Dichalcogenides: Tailoring Electrochemical and Catalytic Properties. *ACS Applied Materials & Interfaces*, **2017**, 9, 25587-25599	9.5	37
370	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
369	CoO and Co3O4 nanoparticles with a tunable particle size. *Ceramics International*, **2014**, 40, 12591-12595	5.1	37
368	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
367	Layered Transition-Metal Ditellurides in Electrocatalytic Applications: Contrasting Properties. *ACS Catalysis*, **2017**, 7, 5706-5716	13.1	36
366	Enhancement of electrochemical and catalytic properties of MoS2 through ball-milling. *Electrochemistry Communications*, **2015**, 54, 36-40	5.1	36
365	Direct electro-optical pumping for hybrid CdSe nanocrystal/III-nitride based nano-light-emitting diodes. *Applied Physics Letters*, **2016**, 108, 061107	3.4	36
364	Bipolar Electrochemical Synthesis of WS2 Nanoparticles and Their Application in Magneto-Immunosandwich Assay. *Advanced Functional Materials*, **2016**, 26, 4094-4098	15.6	35
363	Synthesis of Carboxylated-Graphenes by the Kolbe-Schmitt Process. *ACS Nano*, **2017**, 11, 1789-1797	16.7	34

362	Graphene oxide layers modified by light energetic ions. *Physical Chemistry Chemical Physics*, **2017**, 19, 10282-10291	3.6	34
361	1T-Phase WS2 Protein-Based Biosensor. *Advanced Functional Materials*, **2017**, 27, 1604923	15.6	34
360	Fluorographane (C1H(x)F(1-x))n: synthesis and properties. *Chemical Communications*, **2015**, 51, 5633-6	5.8	34
359	Synthesis of MnO, Mn2O3 and Mn3O4 nanocrystal clusters by thermal decomposition of manganese glycerolate. *Ceramics International*, **2015**, 41, 595-601	5.1	34
358	A New Member of the Graphene Family: Graphene Acid. *Chemistry - A European Journal*, **2016**, 22, 17416-17424	4.8	34
357	Cytotoxicity of Exfoliated Layered Vanadium Dichalcogenides. *Chemistry - A European Journal*, **2017**, 23, 684-690	4.8	34
356	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
355	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
354	TaS, TaSe, and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. *ACS Catalysis*, **2020**, 10, 3313-3325	13.1	33
353	Highly selective removal of Ga3+ ions from Al3+/Ga3+ mixtures using graphite oxide. *Carbon*, **2015**, 89, 121-129	10.4	32
352	Cytotoxicity of halogenated graphenes. *Nanoscale*, **2014**, 6, 1173-80	7.7	32
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350	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
349	Layered Black Phosphorus as a Selective Vapor Sensor. *Angewandte Chemie*, **2015**, 127, 14525-14528	3.6	32
348	Preparation of amorphous antimicrobial selenium nanoparticles stabilized by odor suppressing surfactant polysorbate 20. *Materials Letters*, **2015**, 152, 207-209	3.3	31
347	Nonconductive layered hexagonal boron nitride exfoliation by bipolar electrochemistry. *Nanoscale*, **2018**, 10, 7298-7303	7.7	31
346	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
345	Cytotoxicity profile of highly hydrogenated graphene. *Chemistry - A European Journal*, **2014**, 20, 6366-73	4.8	31

344	A limited anodic and cathodic potential window of MoS2: limitations in electrochemical applications. *Nanoscale*, **2015**, 7, 3126-9	7.7	30
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342	Niobium disulphide (NbS2)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 25593-25608	13	30
341	Toxicity of layered semiconductor chalcogenides: beware of interferences. *RSC Advances*, **2015**, 5, 67485-67492	3.7	29
340	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
339	Electrochemistry of layered metal diborides. *Nanoscale*, **2018**, 10, 11544-11552	7.7	29
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