Zdenek Sofer

List of Publications by Year in descending order

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529 papers 24,550 citations

79 h-index 128 g-index

551 all docs

551 docs citations

551 times ranked

25048 citing authors

#	Article	IF	Citations
1	2D Monoelemental Arsenene, Antimonene, and Bismuthene: Beyond Black Phosphorus. Advanced Materials, 2017, 29, 1605299.	11.1	601
2	2H → 1T phase transition and hydrogen evolution activity of MoS ₂ , MoSe ₂ , WS ₂ and WSe ₂ strongly depends on the MX ₂ composition. Chemical Communications, 2015, 51, 8450-8453.	2.2	565
3	Layered transition metal dichalcogenides for electrochemical energy generation and storage. Journal of Materials Chemistry A, 2014, 2, 8981-8987.	5.2	552
4	Black Phosphorus Rediscovered: From Bulk Material to Monolayers. Angewandte Chemie - International Edition, 2017, 56, 8052-8072.	7.2	407
5	Graphenes prepared by Staudenmaier, Hofmann and Hummers methods with consequent thermal exfoliation exhibit very different electrochemical properties. Nanoscale, 2012, 4, 3515.	2.8	363
6	Cytotoxicity of Exfoliated Transitionâ€Metal Dichalcogenides (MoS ₂ , WS ₂ , and) Tj ETC 2014, 20, 9627-9632.	Qq0 0 0 rg 1.7	BT /Overlock 358
7	Sulfur-Doped Graphene <i>via</i> Thermal Exfoliation of Graphite Oxide in H ₂ S, SO ₂ , or CS ₂ Gas. ACS Nano, 2013, 7, 5262-5272.	7.3	321
8	Layered and two dimensional metal oxides for electrochemical energy conversion. Energy and Environmental Science, 2019, 12, 41-58.	15.6	310
9	Electrochemistry at Chemically Modified Graphenes. Chemistry - A European Journal, 2011, 17, 10763-10770.	1.7	288
10	Electrochemistry of Transition Metal Dichalcogenides: Strong Dependence on the Metal-to-Chalcogen Composition and Exfoliation Method. ACS Nano, 2014, 8, 12185-12198.	7. 3	288
11	Carboxylic Carbon Quantum Dots as a Fluorescent Sensing Platform for DNA Detection. ACS Applied Materials & Detection. AC	4.0	261
12	Lithium Intercalation Compound Dramatically Influences the Electrochemical Properties of Exfoliated MoS ₂ . Small, 2015, 11, 605-612.	5.2	250
13	Synthesis of Strongly Fluorescent Graphene Quantum Dots by Cage-Opening Buckminsterfullerene. ACS Nano, 2015, 9, 2548-2555.	7.3	248
14	Layered Platinum Dichalcogenides (PtS ₂ , PtSe ₂ , and PtTe ₂) Electrocatalysis: Monotonic Dependence on the Chalcogen Size. Advanced Functional Materials, 2016, 26, 4306-4318.	7.8	228
15	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. Angewandte Chemie - International Edition, 2017, 56, 10443-10445.	7.2	228
16	Electrocatalysis of layered Group 5 metallic transition metal dichalcogenides (MX ₂ , M =) Tj ETQq0 0	0 _{5.2} BT /O	verlock 10 Tf 218
17	Pnictogen (As, Sb, Bi) Nanosheets for Electrochemical Applications Are Produced by Shear Exfoliation Using Kitchen Blenders. Angewandte Chemie - International Edition, 2017, 56, 14417-14422.	7.2	216
18	Noble metal (Pd, Ru, Rh, Pt, Au, Ag) doped graphene hybrids for electrocatalysis. Nanoscale, 2012, 4, 5002.	2.8	214

#	Article	IF	CITATION
19	3D-Printed Graphene/Polylactic Acid Electrodes Promise High Sensitivity in Electroanalysis. Analytical Chemistry, 2018, 90, 5753-5757.	3.2	205
20	Doping with Graphitic Nitrogen Triggers Ferromagnetism in Graphene. Journal of the American Chemical Society, 2017, 139, 3171-3180.	6.6	202
21	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, 12899-12904.	3.3	195
22	Graphene oxide immobilized enzymes show high thermal and solvent stability. Nanoscale, 2015, 7, 5852-5858.	2.8	195
23	3D Printed Graphene Electrodes' Electrochemical Activation. ACS Applied Materials & amp; Interfaces, 2018, 10, 40294-40301.	4.0	188
24	Layered Black Phosphorus as a Selective Vapor Sensor. Angewandte Chemie - International Edition, 2015, 54, 14317-14320.	7.2	187
25	Catalytic and Charge Transfer Properties of Transition Metal Dichalcogenides Arising from Electrochemical Pretreatment. ACS Nano, 2015, 9, 5164-5179.	7.3	184
26	3R phase of MoS ₂ and WS ₂ outperforms the corresponding 2H phase for hydrogen evolution. Chemical Communications, 2017, 53, 3054-3057.	2.2	180
27	Layered Metal Thiophosphite Materials: Magnetic, Electrochemical, and Electronic Properties. ACS Applied Materials & Description (2017), 9, 12563-12573.	4.0	179
28	Negative Electrocatalytic Effects of p-Doping Niobium and Tantalum on MoS ₂ and WS ₂ for the Hydrogen Evolution Reaction and Oxygen Reduction Reaction. ACS Catalysis, 2016, 6, 5724-5734.	5. 5	174
29	The Cytotoxicity of Layered Black Phosphorus. Chemistry - A European Journal, 2015, 21, 13991-13995.	1.7	173
30	Metallic Impurities in Graphenes Prepared from Graphite Can Dramatically Influence Their Properties. Angewandte Chemie - International Edition, 2012, 51, 500-503.	7.2	164
31	MoS ₂ exhibits stronger toxicity with increased exfoliation. Nanoscale, 2014, 6, 14412-14418.	2.8	162
32	The Covalent Functionalization of Layered Black Phosphorus by Nucleophilic Reagents. Angewandte Chemie - International Edition, 2017, 56, 9891-9896.	7.2	159
33	Will Any Crap We Put into Graphene Increase Its Electrocatalytic Effect?. ACS Nano, 2020, 14, 21-25.	7.3	158
34	Graphite Oxides: Effects of Permanganate and Chlorate Oxidants on the Oxygen Composition. Chemistry - A European Journal, 2012, 18, 13453-13459.	1.7	156
35	MXene Titanium Carbide-based Biosensor: Strong Dependence of Exfoliation Method on Performance. Analytical Chemistry, 2020, 92, 2452-2459.	3.2	155
36	Tuning of fluorine content in graphene: towards large-scale production of stoichiometric fluorographene. Nanoscale, 2015, 7, 13646-13655.	2.8	153

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37	Searching for Magnetism in Hydrogenated Graphene: Using Highly Hydrogenated Graphene Prepared <i>via</i> Birch Reduction of Graphite Oxides. ACS Nano, 2013, 7, 5930-5939.	7.3	149
38	Halogenation of Graphene with Chlorine, Bromine, or Iodine by Exfoliation in a Halogen Atmosphere. Chemistry - A European Journal, 2013, 19, 2655-2662.	1.7	143
39	Black Phosphorus Nanoparticle Labels for Immunoassays via Hydrogen Evolution Reaction Mediation. Analytical Chemistry, 2016, 88, 10074-10079.	3.2	142
40	Layered Black Phosphorus: Strongly Anisotropic Magnetic, Electronic, and Electronâ€Transfer Properties. Angewandte Chemie - International Edition, 2016, 55, 3382-3386.	7.2	139
41	1T-Phase Transition Metal Dichalcogenides (MoS ₂ , MoSe ₂ , WS ₂ ,) Tj ETQq Enzyme-Based Biosensor. ACS Applied Materials & Dichard Samp; Interfaces, 2017, 9, 40697-40706.	1 1 0.7843 4.0	314 rgBT /C 138
42	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, 13774-13779.	3.3	133
43	Pristine Basal―and Edgeâ€Planeâ€Oriented Molybdenite MoS ₂ Exhibiting Highly Anisotropic Properties. Chemistry - A European Journal, 2015, 21, 7170-7178.	1.7	133
44	Transition metal dichalcogenides (MoS2, MoSe2, WS2 and WSe2) exfoliation technique has strong influence upon their capacitance. Electrochemistry Communications, 2015, 56, 24-28.	2.3	129
45	Equipartition of Energy Defines the Size–Thickness Relationship in Liquid-Exfoliated Nanosheets. ACS Nano, 2019, 13, 7050-7061.	7.3	123
46	Metallic 1Tâ€WS ₂ for Selective Impedimetric Vapor Sensing. Advanced Functional Materials, 2015, 25, 5611-5616.	7.8	122
47	Synthesis and Applications of Graphene Oxide. Materials, 2022, 15, 920.	1.3	121
48	Few-layer black phosphorus nanoparticles. Chemical Communications, 2016, 52, 1563-1566.	2.2	120
49	Inherently Electroactive Graphene Oxide Nanoplatelets As Labels for Single Nucleotide Polymorphism Detection. ACS Nano, 2012, 6, 8546-8551.	7.3	113
50	Towards graphene bromide: bromination of graphite oxide. Nanoscale, 2014, 6, 6065-6074.	2.8	109
51	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.	7.3	109
52	Boron-Doped Graphene: Scalable and Tunable p-Type Carrier Concentration Doping. Journal of Physical Chemistry C, 2013, 117, 23251-23257.	1.5	108
53	Recent Developments on the Single Atom Supported at 2D Materials Beyond Graphene as Catalysts. ACS Catalysis, 2020, 10, 9634-9648.	5.5	102
54	Chemistry of Graphene Derivatives: Synthesis, Applications, and Perspectives. Chemistry - A European Journal, 2018, 24, 5992-6006.	1.7	99

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55	Catalytic properties of group 4 transition metal dichalcogenides (MX ₂ ; M = Ti, Zr, Hf; X =) Tj ETQq1	1 0.78431	4ggBT/Ove
56	Voltammetry of Layered Black Phosphorus: Electrochemistry of Multilayer Phosphorene. ChemElectroChem, 2015, 2, 324-327.	1.7	97
57	Exfoliation of Layered Topological Insulators Bi ₂ Se ₃ and Bi ₂ Te ₃ <i>via</i> Electrochemistry. ACS Nano, 2016, 10, 11442-11448.	7.3	97
58	Graphene materials preparation methods have dramatic influence upon their capacitance. Electrochemistry Communications, 2012, 14, 5-8.	2.3	96
59	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.	2.3	96
60	Pnictogenâ∈Based Enzymatic Phenol Biosensors: Phosphorene, Arsenene, Antimonene, and Bismuthene. Angewandte Chemie - International Edition, 2019, 58, 134-138.	7.2	96
61	The chemistry of CVD graphene. Journal of Materials Chemistry C, 2018, 6, 6082-6101.	2.7	95
62	Sulfur Doping Induces Strong Ferromagnetic Ordering in Graphene: Effect of Concentration and Substitution Mechanism. Advanced Materials, 2016, 28, 5045-5053.	11.1	94
63	Beyond Graphene: Chemistry of Group 14 Graphene Analogues: Silicene, Germanene, and Stanene. ACS Nano, 2019, 13, 8566-8576.	7.3	93
64	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.	7.3	92
65	Radioactive Uranium Preconcentration <i>via</i> Self-Propelled Autonomous Microrobots Based on Metal–Organic Frameworks. ACS Nano, 2019, 13, 11477-11487.	7.3	90
66	Lithium Exfoliated Vanadium Dichalcogenides (VS ₂ , VSe ₂ , VTe ₂) Exhibit Dramatically Different Properties from Their Bulk Counterparts. Advanced Materials Interfaces, 2016, 3, 1600433.	1.9	89
67	Synthesis procedure and type of graphite oxide strongly influence resulting graphene properties. Applied Materials Today, 2016, 4, 45-53.	2.3	87
68	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.	5.2	87
69	Pnictogen (As, Sb, Bi) Nanosheets for Electrochemical Applications Are Produced by Shear Exfoliation Using Kitchen Blenders. Angewandte Chemie, 2017, 129, 14609-14614.	1.6	87
70	Unusual Inherent Electrochemistry of Graphene Oxides Prepared Using Permanganate Oxidants. Chemistry - A European Journal, 2013, 19, 12673-12683.	1.7	86
71	Layered SnS versus SnS ₂ : Valence and Structural Implications on Electrochemistry and Clean Energy Electrocatalysis. Journal of Physical Chemistry C, 2016, 120, 24098-24111.	1.5	85
72	Black Phosphorus Nanoflakes/Polyaniline Hybrid Material for High-Performance Pseudocapacitors. Journal of Physical Chemistry C, 2017, 121, 20532-20538.	1.5	85

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73	Metal-Free Visible-Light Photoactivated C ₃ N ₄ Bubble-Propelled Tubular Micromotors with Inherent Fluorescence and On/Off Capabilities. ACS Nano, 2018, 12, 12482-12491.	7.3	85
74	Exfoliated Layered Manganese Trichalcogenide Phosphite (MnP <i>X</i> ₃ , <i>X</i> = S, Se) as Electrocatalytic van der Waals Materials for Hydrogen Evolution. Advanced Functional Materials, 2019, 29, 1805975.	7.8	85
75	Proteinase-sculptured 3D-printed graphene/polylactic acid electrodes as potential biosensing platforms: towards enzymatic modeling of 3D-printed structures. Nanoscale, 2019, 11, 12124-12131.	2.8	84
76	Towards stoichiometric analogues of graphene: graphane, fluorographene, graphol, graphene acid and others. Chemical Society Reviews, 2017, 46, 4450-4463.	18.7	83
77	The Role of the Metal Element in Layered Metal Phosphorus Triselenides upon Their Electrochemical Sensing and Energy Applications. ACS Catalysis, 2017, 7, 8159-8170.	5.5	83
78	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.	5.0	83
79	Black phosphorus nanoparticles as a novel fluorescent sensing platform for nucleic acid detection. Materials Chemistry Frontiers, 2017, 1, 1130-1136.	3.2	82
80	Cooperative Multifunctional Selfâ€Propelled Paramagnetic Microrobots with Chemical Handles for Cell Manipulation and Drug Delivery. Advanced Functional Materials, 2018, 28, 1804343.	7.8	81
81	Solutionâ€Processed GaSe Nanoflakeâ€Based Films for Photoelectrochemical Water Splitting and Photoelectrochemicalâ€Type Photodetectors. Advanced Functional Materials, 2020, 30, 1909572.	7.8	81
82	Layered transition metal oxyhydroxides as tri-functional electrocatalysts. Journal of Materials Chemistry A, 2015, 3, 11920-11929.	5.2	80
83	Aromatic-Exfoliated Transition Metal Dichalcogenides: Implications for Inherent Electrochemistry and Hydrogen Evolution. ACS Catalysis, 2016, 6, 4594-4607.	5.5	80
84	Atomically Thin 2Dâ€Arsenene by Liquidâ€Phased Exfoliation: Toward Selective Vapor Sensing. Advanced Functional Materials, 2019, 29, 1807004.	7.8	80
85	Integrated Biomonitoring Sensing with Wearable Asymmetric Supercapacitors Based on Ti ₃ C ₂ MXene and 1Tâ€Phase WS ₂ Nanosheets. Advanced Functional Materials, 2020, 30, 2003673.	7.8	80
86	Functional Protection of Exfoliated Black Phosphorus by Noncovalent Modification with Anthraquinone. ACS Nano, 2018, 12, 5666-5673.	7.3	79
87	High-pressure hydrogenation of graphene: towards graphane. Nanoscale, 2012, 4, 7006.	2.8	78
88	Transition Metal (Mn, Fe, Co, Ni)â€Doped Graphene Hybrids for Electrocatalysis. Chemistry - an Asian Journal, 2013, 8, 1295-1300.	1.7	78
89	Solutionâ€Based Processing of Optoelectronically Active Indium Selenide. Advanced Materials, 2018, 30, e1802990.	11.1	78
90	Ultrafast Electrochemical Trigger Drug Delivery Mechanism for Nanographene Micromachines. Advanced Functional Materials, 2019, 29, 1806696.	7.8	78

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91	Electrochemistry of layered GaSe and GeS: applications to ORR, OER and HER. Physical Chemistry Chemical Physics, 2016, 18, 1699-1711.	1.3	77
92	Unconventionally Layered CoTe ₂ and NiTe ₂ as Electrocatalysts for Hydrogen Evolution. Chemistry - A European Journal, 2017, 23, 11719-11726.	1.7	76
93	Catalytic and Lightâ€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.	7.8	74
94	Precise Tuning of the Charge Transfer Kinetics and Catalytic Properties of MoS ₂ Materials via Electrochemical Methods. Chemistry - A European Journal, 2014, 20, 17426-17432.	1.7	73
95	Uranium- and Thorium-Doped Graphene for Efficient Oxygen and Hydrogen Peroxide Reduction. ACS Nano, 2014, 8, 7106-7114.	7.3	73
96	Metal Phosphorous Trichalcogenides (MPCh ₃): From Synthesis to Contemporary Energy Challenges. Angewandte Chemie - International Edition, 2019, 58, 9326-9337.	7.2	73
97	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.	5.2	72
98	Selfâ€Propelled Supercapacitors for Onâ€Demand Circuit Configuration Based on WS ₂ Nanoparticles Micromachines. Advanced Functional Materials, 2016, 26, 6662-6667.	7.8	70
99	ZnO/ZnO ₂ /Pt Janus Micromotors Propulsion Mode Changes with Size and Interface Structure: Enhanced Nitroaromatic Explosives Degradation under Visible Light. ACS Applied Materials & Light (1997) & Light (199	4.0	70
100	Products of Degradation of Black Phosphorus in Protic Solvents. ACS Nano, 2018, 12, 8390-8396.	7.3	70
101	Water-soluble highly fluorinated graphite oxide. RSC Advances, 2014, 4, 1378-1387.	1.7	69
102	Alternating Misfit Layered Transition/Alkaline Earth Metal Chalcogenide Ca ₃ Co ₄ O ₉ as a New Class of Chalcogenide Materials for Hydrogen Evolution. Chemistry of Materials, 2014, 26, 4130-4136.	3.2	68
103	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.	2.4	67
104	Chiral molecular intercalation superlattices. Nature, 2022, 606, 902-908.	13.7	67
105	Graphene-Supported 2D transition metal dichalcogenide van der waals heterostructures. Applied Materials Today, 2020, 19, 100600.	2.3	64
106	Exfoliated transition metal dichalcogenides (MoS2, MoSe2, WS2, WSe2): An electrochemical impedance spectroscopic investigation. Electrochemistry Communications, 2015, 50, 39-42.	2.3	62
107	Nitrogen doped graphene: influence of precursors and conditions of the synthesis. Journal of Materials Chemistry C, 2014, 2, 2887-2893.	2.7	61
108	Vacuum-assisted microwave reduction/exfoliation of graphite oxide and the influence of precursor graphite oxide. Carbon, 2014, 77, 508-517.	5.4	61

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109	2H → 1T Phase Change in Direct Synthesis of WS ₂ Nanosheets via Solution-Based Electrochemical Exfoliation and Their Catalytic Properties. ACS Applied Materials & Samp; Interfaces, 2017, 9, 26350-26356.	4.0	61
110	Oleic acid/oleylamine ligand pair: a versatile combination in the synthesis of colloidal nanoparticles. Nanoscale Horizons, 2022, 7, 941-1015.	4.1	61
111	TaS ₂ , TaSe ₂ , and Their Heterogeneous Films as Catalysts for the Hydrogen Evolution Reaction. ACS Catalysis, 2020, 10, 3313-3325.	5.5	60
112	Boron-doped graphene and boron-doped diamond electrodes: detection of biomarkers and resistance to fouling. Analyst, The, 2013, 138, 4885.	1.7	59
113	Schwarzer Phosphor neu entdeckt: vom Volumenmaterial zu Monoschichten. Angewandte Chemie, 2017, 129, 8164-8185.	1.6	59
114	Interaction of single- and double-stranded DNA with multilayer MXene by fluorescence spectroscopy and molecular dynamics simulations. Chemical Science, 2019, 10, 10010-10017.	3.7	59
115	Cation-Controlled Electrocatalytical Activity of Transition-Metal Disulfides. ACS Catalysis, 2018, 8, 2774-2781.	5. 5	58
116	Toward graphene chloride: chlorination of graphene and graphene oxide. RSC Advances, 2016, 6, 66884-66892.	1.7	56
117	Graphene Oxide Sorption Capacity toward Elements over the Whole Periodic Table: A Comparative Study. Journal of Physical Chemistry C, 2016, 120, 24203-24212.	1.5	56
118	Origin of exotic ferromagnetic behavior in exfoliated layered transition metal dichalcogenides MoS ₂ and WS ₂ . Nanoscale, 2016, 8, 1960-1967.	2.8	56
119	Functional Nanosheet Synthons by Covalent Modification of Transition-Metal Dichalcogenides. Chemistry of Materials, 2017, 29, 2066-2073.	3.2	56
120	Electrochemical Exfoliation of Layered Black Phosphorus into Phosphorene. Angewandte Chemie, 2017, 129, 10579-10581.	1.6	56
121	Graphitic carbon nitride: Effects of various precursors on the structural, morphological and electrochemical sensing properties. Applied Materials Today, 2017, 8, 150-162.	2.3	56
122	Layered PtTe ₂ Matches Electrocatalytic Performance of Pt/C for Oxygen Reduction Reaction with Significantly Lower Toxicity. ACS Sustainable Chemistry and Engineering, 2018, 6, 7432-7441.	3.2	56
123	Liquid-Phase Exfoliated GeSe Nanoflakes for Photoelectrochemical-Type Photodetectors and Photoelectrochemical Water Splitting. ACS Applied Materials & Samp; Interfaces, 2020, 12, 48598-48613.	4.0	56
124	Nanoconfined deep eutectic solvent in laminated MXene for efficient CO2 separation. Chemical Engineering Journal, 2021, 405, 126961.	6.6	56
125	Interfacial Covalent Bonds Regulated Electronâ€Deficient 2D Black Phosphorus for Electrocatalytic Oxygen Reactions. Advanced Materials, 2021, 33, e2008752.	11.1	56
126	Towards graphene iodide: iodination of graphite oxide. Nanoscale, 2015, 7, 261-270.	2.8	54

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127	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.	2.3	54
128	Fe(0)-embedded thermally reduced graphene oxide as efficient nanocatalyst for reduction of nitro compounds to amines. Chemical Engineering Journal, 2020, 382, 122469.	6.6	54
129	Direct Observation of Magnon-Phonon Strong Coupling in Two-Dimensional Antiferromagnet at High Magnetic Fields. Physical Review Letters, 2021, 127, 097401.	2.9	54
130	Impact Electrochemistry of Layered Transition Metal Dichalcogenides. ACS Nano, 2015, 9, 8474-8483.	7.3	53
131	Synthesis Protocols of the Most Common Layered Carbide and Nitride MAX Phases. Small Methods, 2020, 4, 1900780.	4.6	53
132	Enhancement of electrochemical and catalytic properties of MoS2 through ball-milling. Electrochemistry Communications, 2015, 54, 36-40.	2.3	51
133	Coke-derived graphene quantum dots as fluorescence nanoquencher in DNA detection. Applied Materials Today, 2017, 7, 138-143.	2.3	51
134	Layered Noble Metal Dichalcogenides: Tailoring Electrochemical and Catalytic Properties. ACS Applied Materials & Samp; Interfaces, 2017, 9, 25587-25599.	4.0	51
135	Black Phosphorus Nanoparticles Potentiate the Anticancer Effect of Oxaliplatin in Ovarian Cancer Cell Line. Advanced Functional Materials, 2017, 27, 1701955.	7.8	51
136	Nonconductive layered hexagonal boron nitride exfoliation by bipolar electrochemistry. Nanoscale, 2018, 10, 7298-7303.	2.8	51
137	Towards highly electrically conductive and thermally insulating graphene nanocomposites: Al ₂ O ₃ –graphene. RSC Advances, 2014, 4, 7418-7424.	1.7	50
138	Layered Transition-Metal Ditellurides in Electrocatalytic Applicationsâ€"Contrasting Properties. ACS Catalysis, 2017, 7, 5706-5716.	5.5	50
139	Niobium disulphide (NbS ₂)-based (heterogeneous) electrocatalysts for an efficient hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 25593-25608.	5.2	50
140	Highly hydrogenated graphene via active hydrogen reduction of graphene oxide in the aqueous phase at room temperature. Nanoscale, 2014, 6, 2153-2160.	2.8	49
141	Mo <i>_x</i> W _{1â^³<i>x</i>} S ₂ Solid Solutions as 3D Electrodes for Hydrogen Evolution Reaction. Advanced Materials Interfaces, 2015, 2, 1500041.	1.9	49
142	Graphene oxide layers modified by light energetic ions. Physical Chemistry Chemical Physics, 2017, 19, 10282-10291.	1.3	49
143	Highly Hydrogenated Graphene through Microwave Exfoliation of Graphite Oxide in Hydrogen Plasma: Towards Electrochemical Applications. Chemistry - A European Journal, 2013, 19, 15583-15592.	1.7	48
144	Chemistry of Layered Pnictogens: Phosphorus, Arsenic, Antimony, and Bismuth. Angewandte Chemie - International Edition, 2019, 58, 7551-7557.	7.2	48

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145	A High-Performance Magnesium Triflate-based Electrolyte for Rechargeable Magnesium Batteries. Cell Reports Physical Science, 2020, 1, 100265.	2.8	48
146	Large-scale quantification of CVD graphene surface coverage. Nanoscale, 2013, 5, 2379.	2.8	47
147	CoO and Co3O4 nanoparticles with a tunable particle size. Ceramics International, 2014, 40, 12591-12595.	2.3	47
148	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, 3527-3531.	1.0	47
149	Preparation of amorphous antimicrobial selenium nanoparticles stabilized by odor suppressing surfactant polysorbate 20. Materials Letters, 2015, 152, 207-209.	1.3	47
150	MAX and MAB Phases: Two-Dimensional Layered Carbide and Boride Nanomaterials for Electrochemical Applications. ACS Applied Nano Materials, 2019, 2, 6010-6021.	2.4	47
151	Concurrent Phosphorus Doping and Reduction of Graphene Oxide. Chemistry - A European Journal, 2014, 20, 4284-4291.	1.7	46
152	Ternary Transition Metal Oxide Nanoparticles with Spinel Structure for the Oxygen Reduction Reaction. ChemElectroChem, 2015, 2, 982-987.	1.7	46
153	Insight into the Mechanism of the Thermal Reduction of Graphite Oxide: Deuterium-Labeled Graphite Oxide Is the Key. ACS Nano, 2015, 9, 5478-5485.	7.3	46
154	Capacitance of p―and nâ€Doped Graphenes is Dominated by Structural Defects Regardless of the Dopant Type. ChemSusChem, 2014, 7, 1102-1106.	3.6	45
155	Synthesis of Carboxylated-Graphenes by the Kolbe–Schmitt Process. ACS Nano, 2017, 11, 1789-1797.	7.3	45
156	Tunable Roomâ€Temperature Synthesis of ReS ₂ Bicatalyst on 3D―and 2Dâ€Printed Electrodes for Photo―and Electrochemical Energy Applications. Advanced Functional Materials, 2020, 30, 1910193.	7.8	45
157	A New Member of the Graphene Family: Graphene Acid. Chemistry - A European Journal, 2016, 22, 17416-17424.	1.7	44
158	Synthesis of MnO, Mn2O3 and Mn3O4 nanocrystal clusters by thermal decomposition of manganese glycerolate. Ceramics International, 2015, 41, 595-601.	2.3	43
159	Bipolar Electrochemical Synthesis of WS ₂ Nanoparticles and Their Application in Magnetoâ€Immunosandwich Assay. Advanced Functional Materials, 2016, 26, 4094-4098.	7.8	43
160	1Tâ€Phase WS ₂ Proteinâ€Based Biosensor. Advanced Functional Materials, 2017, 27, 1604923.	7.8	43
161	Allâ€Solutionâ€Processed Van der Waals Heterostructures for Waferâ€Scale Electronics. Advanced Materials, 2022, 34, e2106110.	11.1	43
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