

Lars Giebeler

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.

138
papers

5,434
citations

41
h-index

69
g-index

149
ext. papers

6,244
ext. citations

7.7
avg, IF

5.78
L-index

#	Paper	IF	Citations
138	Novel Fe-0.3Cr-0.4Mo-1.5MnNi-0.6C tool steel with superior properties under quasi-static and dynamic loading. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 829, 142156	5.3	0
137	The role of electrons during the martensitic phase transformation in NiTi-based shape memory alloys. <i>Materials Today Physics</i> , 2022 , 100671	8	
136	MXenes and the progress of Li ⁺ battery development – perspective. <i>JPhys Energy</i> , 2021 , 3, 021002	4.9	4
135	T2- and T1 relaxivities and magnetic hyperthermia of iron-oxide nanoparticles combined with paramagnetic Gd complexes. <i>Journal of Chemical Sciences</i> , 2021 , 133, 1	1.8	1
134	MXenes in lithium-sulfur batteries: Scratching the surface of a complex 2D material – A minireview. <i>Materials Today Communications</i> , 2021 , 27, 102323	2.5	8
133	High-Pressure-Sintering-Induced Microstructural Engineering for an Ultimate Phonon Scattering of Thermoelectric Half-Heusler Compounds. <i>Small</i> , 2021 , 17, e2102045	11	3
132	Structural Aspects of P2-Type Na _{0.67} Mn _{0.6} Ni _{0.2} Li _{0.2} O ₂ (MNL) Stabilization by Lithium Defects as a Cathode Material for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021 , 31, 2102939	15.6	7
131	A facile method to stabilize sodium metal anodes towards high-performance sodium batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 9038-9047	13	8
130	A Highly Conductive Gel Polymer Electrolyte for Li/Mg Hybrid Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 1906-1914	6.1	2
129	Effect of silver additions on the microstructure, mechanical properties and corrosion behavior of biodegradable Fe-30Mn-6Si. <i>Materials Today Communications</i> , 2021 , 28, 102689	2.5	1
128	Progress and challenges in using sustainable carbon anodes in rechargeable metal-ion batteries. <i>Progress in Energy and Combustion Science</i> , 2021 , 87, 100929	33.6	8
127	Ordered Ti-Fe-O nanotubes as additive-free anodes for lithium ion batteries. <i>Applied Materials Today</i> , 2020 , 20, 100676	6.6	3
126	Revisiting the Crystal Structure of BaCe _{0.4} Zr _{0.4} Y _{0.2} O ₃ Proton Conducting Perovskite and Its Correlation with Transport Properties. <i>ACS Applied Energy Materials</i> , 2020 , 3, 2881-2892	6.1	7
125	Highly Efficient Multicomponent Gel Biopolymer Binder Enables Ultrafast Cycling and Applicability in Diverse Battery Formats. <i>ACS Applied Materials & Interfaces</i> , 2020 ,	9.5	2
124	LiV ₃ O ₈ -Based Functional Separator Coating as Effective Polysulfide Mediator for Lithium-Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 2893-2899	6.1	13
123	TiNb ₂ O ₇ and VNb ₉ O ₂₅ of ReO ₃ Type in Hybrid Mg/Li Batteries: Electrochemical and Interfacial Insights. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 25239-25248	3.8	5
122	ROS-generation and cellular uptake behavior of amino-silica nanoparticles arisen from their uploading by both iron-oxides and hexamolybdenum clusters. <i>Materials Science and Engineering C</i> , 2020 , 117, 111305	8.3	7

121	In Situ Raman Spectroscopy on Silicon Nanowire Anodes Integrated in Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5378-A5385	3.9	29
120	Electrochemical Behavior of Microparticulate Silicon Anodes in Ether-Based Electrolytes: Why Does LiNO ₃ Affect Negatively?. <i>ACS Applied Energy Materials</i> , 2019 , 2, 4411-4420	6.1	4
119	On the origin of mesopore collapse in functionalized porous carbons. <i>Carbon</i> , 2019 , 149, 743-749	10.4	8
118	Fully sp ² -Carbon-Linked Crystalline Two-Dimensional Conjugated Polymers: Insight into 2D Poly(phenylenecyanovinylene) Formation and its Optoelectronic Properties. <i>Chemistry - A European Journal</i> , 2019 , 25, 6562-6568	4.8	28
117	Fluorescent magnetic nanoparticles for modulating the level of intracellular Ca in motoneurons. <i>Nanoscale</i> , 2019 , 11, 16103-16113	7.7	7
116	Comparative study of the sustainable preparation of FeMn thin films via electrodeposition and magnetron co-sputtering. <i>Surface and Coatings Technology</i> , 2019 , 375, 182-196	4.4	5
115	An Efficient Two-Polymer Binder for High-Performance Silicon Nanoparticle-Based Lithium-Ion Batteries: A Systematic Case Study with Commercial Polyacrylic Acid and Polyvinyl Butyral Polymers. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5275-A5286	3.9	19
114	A top-down approach to build Li ₂ S@rGO cathode composites for high-loading lithium-sulfur batteries in carbonate-based electrolyte. <i>Electrochimica Acta</i> , 2019 , 296, 243-250	6.7	20
113	Nitrogen-Doped Biomass-Derived Carbon Formed by Mechanochemical Synthesis for Lithium-Sulfur Batteries. <i>ChemSusChem</i> , 2019 , 12, 310-319	8.3	56
112	Surface and Electrochemical Studies on Silicon Diphosphide as Easy-to-Handle Anode Material for Lithium-Based Batteries-the Phosphorus Path. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 7096-7108	9.5	27
111	S and B microalloying of biodegradable Fe-30Mn-1C - Effects on microstructure, tensile properties, in vitro degradation and cytotoxicity. <i>Materials and Design</i> , 2018 , 142, 22-35	8.1	17
110	Lightweight, free-standing 3D interconnected carbon nanotube foam as a flexible sulfur host for high performance lithium-sulfur battery cathodes. <i>Energy Storage Materials</i> , 2018 , 10, 206-215	19.4	72
109	Current Advances in TiO ₂ -Based Nanostructure Electrodes for High Performance Lithium Ion Batteries. <i>Batteries</i> , 2018 , 4, 7	5.7	82
108	One-Pot Synthesis of Graphene-Sulfur Composites for Li-S Batteries: Influence of Sulfur Precursors. <i>Journal of Carbon Research</i> , 2018 , 4, 2	3.3	6
107	Mechanochemical Functionalization of Carbon Black at Room Temperature. <i>Journal of Carbon Research</i> , 2018 , 4, 14	3.3	6
106	Titania-Silica Catalysts for Lactide Production from Renewable Alkyl Lactates: Structure-Activity Relations. <i>ACS Catalysis</i> , 2018 , 8, 8130-8139	13.1	49
105	Binding Energy Referencing for XPS in Alkali Metal-Based Battery Materials Research (II): Application to Complex Composite Electrodes. <i>Batteries</i> , 2018 , 4, 36	5.7	42
104	Synthetic and Catalytic Potential of Amorphous Mesoporous Aluminosilicates Prepared by Postsynthetic Aluminations of Silica in Aqueous Media. <i>ChemCatChem</i> , 2018 , 10, 1385-1397	5.2	6

103	Electrochemical behavior of LiV ₃ O ₈ positive electrode in hybrid Li,Na <i>bn</i> batteries. <i>Journal of Power Sources</i> , 2018 , 373, 1-10	8.9	11
102	Microstructure and mechanical properties of a heat-treatable Al-3.5Cu-1.5Mg-1Si alloy produced by selective laser melting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 711, 562-570	5.3	73
101	Electrodeposition of manganese layers from sustainable sulfate based electrolytes. <i>Surface and Coatings Technology</i> , 2018 , 334, 261-268	4.4	12
100	Metal-based nanostructured materials for advanced lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 23127-23168	13	128
99	Silicon monophosphide as a possible lithium battery anode material. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 19974-19978	13	15
98	On the mechanistic role of nitrogen-doped carbon cathodes in lithium-sulfur batteries with low electrolyte weight portion. <i>Nano Energy</i> , 2018 , 54, 116-128	17.1	53
97	Irreversible Made Reversible: Increasing the Electrochemical Capacity by Understanding the Structural Transformations of Na CoTiO. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 36108-36119	9.5	10
96	Operando Studies of Antiperovskite Lithium Battery Cathode Material (Li ₂ Fe)SO. <i>ACS Applied Energy Materials</i> , 2018 , 1, 6593-6599	6.1	9
95	Electrodeposited metal-organic framework films as self-assembled hierarchically superstructured supports for stable omniphobic surface coatings. <i>Scientific Reports</i> , 2018 , 8, 15400	4.9	10
94	Low-Temperature Tailoring of Copper-Deficient Cu ₃ P Electric Properties, Phase Transitions, and Performance in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 7111-7123	9.6	20
93	Synthesis, Characterization, and Electrochemistry of Layered Chalcogenides LiCu Ch (Ch = Se, Te). <i>Inorganic Chemistry</i> , 2018 , 57, 7201-7207	5.1	1
92	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiO ₂ by Chemical Vapor Deposition. <i>ACS Nano</i> , 2017 , 11, 1946-1956	16.7	87
91	Co(II) ethylene glycol carboxylates for Co ₃ O ₄ nanoparticle and nanocomposite formation. <i>Journal of Materials Science</i> , 2017 , 52, 6697-6711	4.3	6
90	Selective laser melting of ultra-high-strength TRIP steel: processing, microstructure, and properties. <i>Journal of Materials Science</i> , 2017 , 52, 4944-4956	4.3	21
89	Solvent-Free Mechanochemical Synthesis of Nitrogen-Doped Nanoporous Carbon for Electrochemical Energy Storage. <i>ChemSusChem</i> , 2017 , 10, 2416-2424	8.3	94
88	Processing of Ti-5553 with improved mechanical properties via an in-situ heat treatment combining selective laser melting and substrate plate heating. <i>Materials and Design</i> , 2017 , 130, 83-89	8.1	39
87	Anodically Grown Binder-Free Nickel Hexacyanoferrate Film: Toward Efficient Water Reduction and Hexacyanoferrate Film Based Full Device for Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18015-18021	9.5	43
86	Microstructure and abrasive wear behavior of a novel FeCrMoVC laser cladding alloy for high-performance tool steels. <i>Wear</i> , 2017 , 382-383, 107-112	3.5	29

85	Size-dependent structural, magnetic, and optical properties of MnCo ₂ O ₄ nanocrystallites. <i>Journal of Applied Physics</i> , 2017 , 121, 194303	2.5	27
84	Hierarchical Ti-Beta Obtained by Simultaneous Desilication and Titanation as an Efficient Catalyst for Cyclooctene Epoxidation. <i>ChemCatChem</i> , 2017 , 9, 3860-3869	5.2	21
83	Nanosized Li ₂ S-based cathodes derived from MoS ₂ for high-energy density LiS cells and SiLi ₂ S full cells in carbonate-based electrolyte. <i>Energy Storage Materials</i> , 2017 , 8, 209-216	19.4	41
82	Softwood Lignin as a Sustainable Feedstock for Porous Carbons as Active Material for Supercapacitors Using an Ionic Liquid Electrolyte. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 4094-4102	8.3	35
81	Novel Solid-State Solar Cell Based on Hole-Conducting MOF-Sensitizer Demonstrating Power Conversion Efficiency of 2.1. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 12930-12935	9.5	40
80	Dichlorosilane-derived nano-silicon inside hollow carbon spheres as a high-performance anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9262-9271	13	21
79	Anionic polymerization of multi-vinylferrocenes. <i>Journal of Organometallic Chemistry</i> , 2017 , 853, 149-158	2.3	2
78	Electrodeposited films to MOF-derived electrochemical energy storage electrodes: a concept of simplified additive-free electrode processing for self-standing, ready-to-use materials. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18420-18428	13	21
77	Coexistence of conversion and intercalation mechanisms in lithium ion batteries: Consequences for microstructure and interaction between the active material and electrolyte. <i>International Journal of Materials Research</i> , 2017 , 108, 971-983	0.5	3
76	Thermodynamic assessment and first principle calculations of the Na-Sb-Sn system. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 1725-1742	5.7	5
75	Effect of thermomechanical processing on the mechanical biofunctionality of a low modulus Ti-40Nb alloy. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 65, 137-150	4.1	43
74	Microstructure, mechanical behavior, and wear properties of FeCrMoVC steel prepared by selective laser melting and casting. <i>Scripta Materialia</i> , 2017 , 126, 41-44	5.6	34
73	Lifetime vs. rate capability: Understanding the role of FEC and VC in high-energy Li-ion batteries with nano-silicon anodes. <i>Energy Storage Materials</i> , 2017 , 6, 26-35	19.4	118
72	Ternary CNTs@TiO ₂ /CoO Nanotube Composites: Improved Anode Materials for High Performance Lithium Ion Batteries. <i>Materials</i> , 2017 , 10,	3.5	12
71	Face Centred Cubic Multi-Component Equiatomic Solid Solutions in the Au-Cu-Ni-Pd-Pt System. <i>Metals</i> , 2017 , 7, 135	2.3	15
70	Microstructure and properties of FeCrMoVC tool steel produced by selective laser melting. <i>Materials and Design</i> , 2016 , 89, 335-341	8.1	100
69	Alloying Behavior of Self-Assembled Noble Metal Nanoparticles. <i>Chemistry - A European Journal</i> , 2016 , 22, 13446-50	4.8	19
68	The Importance of Pore Size and Surface Polarity for Polysulfide Adsorption in Lithium Sulfur Batteries. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600508	4.6	62

67	High Area Capacity Lithium-Sulfur Full-cell Battery with Prelithiated Silicon Nanowire-Carbon Anodes for Long Cycling Stability. <i>Scientific Reports</i> , 2016 , 6, 27982	4.9	63
66	Synergistically Enhanced Polysulfide Chemisorption Using a Flexible Hybrid Separator with N and S Dual-Doped Mesoporous Carbon Coating for Advanced Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 14586-95	9.5	126
65	Enhanced polysulphide redox reaction using a RuO ₂ nanoparticle-decorated mesoporous carbon as functional separator coating for advanced lithium-sulphur batteries. <i>Chemical Communications</i> , 2016 , 52, 8134-7	5.8	68
64	A novel high-throughput setup for in situ powder diffraction on coin cell batteries. <i>Journal of Applied Crystallography</i> , 2016 , 49, 340-345	3.8	53
63	Wettability and work of adhesion of liquid sulfur on carbon materials for electrical energy storage applications. <i>Carbon</i> , 2016 , 98, 702-707	10.4	7
62	Amphiphiles with polyethyleneoxide-polyethylenecarbonate chains for hydrophilic coating of iron oxide cores, loading by Gd(III) ions and tuning R ₂ /R ₁ ratio. <i>Reactive and Functional Polymers</i> , 2016 , 99, 107-113	4.6	5
61	Reconfiguration of lithium sulphur batteries: Enhancement of LiS cell performance by employing a highly porous conductive separator coating. <i>Journal of Power Sources</i> , 2016 , 309, 76-81	8.9	57
60	Anodically fabricated TiO ₂ /SnO ₂ nanotubes and their application in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 5542-5552	13	38
59	Role of 1,3-Dioxolane and LiNO ₃ Addition on the Long Term Stability of Nanostructured Silicon/Carbon Anodes for Rechargeable Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A557-A564	3.9	71
58	Improved cycling stability of lithium-sulfur batteries using a polypropylene-supported nitrogen-doped mesoporous carbon hybrid separator as polysulfide adsorbent. <i>Journal of Power Sources</i> , 2016 , 303, 317-324	8.9	96
57	Layered-to-Tunnel Structure Transformation and Oxygen Redox Chemistry in LiRhO ₂ upon Li Extraction and Insertion. <i>Inorganic Chemistry</i> , 2016 , 55, 7079-89	5.1	18
56	The impact of surface morphology on the magnetovolume transition in magnetocaloric LaFe _{11.8} Si _{1.2} . <i>APL Materials</i> , 2016 , 4, 106101	5.7	13
55	Hierarchically nanostructured hollow carbon nanospheres for ultra-fast and long-life energy storage. <i>Carbon</i> , 2016 , 106, 306-313	10.4	28
54	Effect of cerium addition on microstructure and mechanical properties of high-strength Fe ₈₅ Cr ₄ Mo ₈ V ₂ C ₁ cast steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 674, 366-374	5.3	27
53	Enhanced Acidity and Accessibility in Al-MCM-41 through Aluminum Activation. <i>Chemistry of Materials</i> , 2016 , 28, 7731-7743	9.6	26
52	Cooperative Catalysis for Multistep Biomass Conversion with Sn/Al Beta Zeolite. <i>ACS Catalysis</i> , 2015 , 5, 928-940	13.1	137
51	Effect of cooling rate on the microstructure and properties of FeCrVC. <i>Journal of Alloys and Compounds</i> , 2015 , 634, 200-207	5.7	18
50	Asymmetric first-order transition and interlocked particle state in magnetocaloric La(Fe,Si) ₁₃ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2015 , 9, 136-140	2.5	41

49	Self-Organized TiO ₂ /CoO Nanotubes as Potential Anode Materials for Lithium Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2015 , 3, 909-919	8.3	41
48	SEI-component formation on sub 5 nm sized silicon nanoparticles in Li-ion batteries: the role of electrode preparation, FEC addition and binders. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 24956-67	3.6	105
47	Low voltage transmission electron microscopy of graphene. <i>Small</i> , 2015 , 11, 515-42	11	37
46	Tailoring Hollow Silicon-Carbon Nanocomposites As High-Performance Anodes in Secondary Lithium-Based Batteries through Economical Chemistry. <i>Chemistry of Materials</i> , 2015 , 27, 37-43	9.6	39
45	Direct catalytic conversion of cellulose to liquid straight-chain alkanes. <i>Energy and Environmental Science</i> , 2015 , 8, 230-240	35.4	176
44	Local magnetism and structural properties of Heusler Ni ₂ MnGa alloys. <i>Physical Review B</i> , 2015 , 91,	3.3	14
43	Functional Mesoporous Carbon-Coated Separator for Long-Life, High-Energy Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2015 , 25, 5285-5291	15.6	311
42	Mesoporous Carbon Interlayers with Tailored Pore Volume as Polysulfide Reservoir for High-Energy Lithium-Sulfur Batteries. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 4580-4587	3.8	110
41	Role of surface functional groups in ordered mesoporous carbide-derived carbon/ionic liquid electrolyte double-layer capacitor interfaces. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2922-8	9.5	57
40	Multimetallic Aerogels by Template-Free Self-Assembly of Au, Ag, Pt, and Pd Nanoparticles. <i>Chemistry of Materials</i> , 2014 , 26, 1074-1083	9.6	116
39	Synthesis and toxicity characterization of carbon coated iron oxide nanoparticles with highly defined size distributions. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2014 , 1840, 160-9	4	35
38	XPS and AES sputter-depth profiling at surfaces of biocompatible passivated Ti-based alloys: concentration quantification considering chemical effects. <i>Surface and Interface Analysis</i> , 2014 , 46, 683-688	1.5	10
37	Hollow carbon nano-onions with hierarchical porosity derived from commercial metal organic framework. <i>Carbon</i> , 2014 , 79, 302-309	10.4	32
36	Composition-dependent magnitude of atomic shuffles in Ti-Nb martensites. <i>Journal of Applied Crystallography</i> , 2014 , 47, 1374-1379	3.8	42
35	B1-Mobilstor: Materials for Sustainable Energy Storage Techniques - Lithium Containing Compounds for Hydrogen and Electrochemical Energy Storage. <i>Advanced Engineering Materials</i> , 2014 , 16, 1189-1195	3.5	14
34	Elastic softening of B-type Ti-Nb alloys by indium (In) additions. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 39, 162-74	4.1	54
33	Silicon oxycarbide-derived carbons from a polyphenylsilsequioxane precursor for supercapacitor applications. <i>Microporous and Mesoporous Materials</i> , 2014 , 188, 140-148	5.3	41
32	Unusual oxidation behavior of light metal hydride by tetrahydrofuran solvent molecules confined in ordered mesoporous carbon. <i>Journal of Materials Research</i> , 2014 , 29, 55-63	2.5	1

31	Preparation and Cycling Performance of Iron or Iron Oxide Containing Amorphous Al-Li Alloys as Electrodes. <i>Inorganics</i> , 2014 , 2, 674-682	2.9	
30	D2 Enertrode: Production Technologies and Component Integration of Nanostructured Carbon Electrodes for Energy Technology Functionalized Carbon Materials for Efficient Electrical Energy Supply. <i>Advanced Engineering Materials</i> , 2014 , 16, 1196-1201	3.5	
29	Na ₅ B ₃ N ternary phase diagram at room temperature for potential anode materials in sodium-ion batteries. <i>Solid State Ionics</i> , 2014 , 268, 261-264	3.3	11
28	Growth, characterization, and magnetic properties of a Li(Mn,Ni)PO ₄ single crystal. <i>Journal of Crystal Growth</i> , 2014 , 386, 16-21	1.6	7
27	Hierarchical Carbide-Derived Carbon Foams with Advanced Mesostructure as a Versatile Electrochemical Energy-Storage Material. <i>Advanced Energy Materials</i> , 2014 , 4, 1300645	21.8	90
26	The effect of boron on microstructure and mechanical properties of high-strength cast FeCrVC. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 586, 267-275	5.3	14
25	Capacitance performance of cobalt hydroxide-based capacitors with utilization of near-neutral electrolytes. <i>Electrochimica Acta</i> , 2013 , 90, 166-170	6.7	20
24	Peculiarities of anisotropic electrical resistivity in Lu ₂ PdSi ₃ single crystals. <i>CrystEngComm</i> , 2013 , 15, 9053-3	3.3	4
23	NaAlH ₄ confined in ordered mesoporous carbon. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 8829-8837	6.7	15
22	CO ₂ reverse selective mixed matrix membranes for H ₂ purification by incorporation of carbon-silica fillers. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 945-953	13	28
21	Functionalised porous nanocomposites: a multidisciplinary approach to investigate designed structures for supercapacitor applications. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 4904	13	22
20	Hydrothermal carbon-based nanostructured hollow spheres as electrode materials for high-power lithium-sulfur batteries. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 6080-7	3.6	156
19	Advances in situ powder diffraction of battery materials: a case study of the new beamline P02.1 at DESY, Hamburg. <i>Journal of Applied Crystallography</i> , 2013 , 46, 1117-1127	3.8	46
18	Novel in situ cell for Raman diagnostics of lithium-ion batteries. <i>Review of Scientific Instruments</i> , 2013 , 84, 073109	1.7	29
17	Investigation of Copper-Cobalt-Oxides as Model Systems for Composite Interactions in Conversion-Type Electrodes for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1333-A1339	3.9	11
16	Amorphous Li-Al-Based Compounds: A Novel Approach for Designing High Performance Electrode Materials for Li-Ion Batteries. <i>Inorganics</i> , 2013 , 1, 14-31	2.9	4
15	Study on the reversible Li-insertion of amorphous and partially crystalline Al ₈₆ Ni ₈ La ₆ and Al ₈₆ Ni ₈ Y ₆ alloys as anode materials for Li-ion batteries. <i>Electrochimica Acta</i> , 2012 , 60, 85-94	6.7	12
14	Microstructural and mechanical characterization of an ultra-high-strength Fe _{86.7} Cr _{4.4} Mo _{0.6} V _{1.1} W _{2.5} C _{4.7} alloy. <i>Journal of Materials Science</i> , 2012 , 47, 267-271	4.3	16

13	Effect of short-term tempering on microstructure and mechanical properties of high-strength FeCrMoVC. <i>Acta Materialia</i> , 2012 , 60, 4468-4476	8.4	25
12	Fast and selective sugar conversion to alkyl lactate and lactic acid with bifunctional carbon-silica catalysts. <i>Journal of the American Chemical Society</i> , 2012 , 134, 10089-101	16.4	292
11	Graphitic nanocrystals inside the pores of mesoporous silica: Synthesis, characterization and an adsorption study. <i>Microporous and Mesoporous Materials</i> , 2011 , 144, 120-133	5.3	18
10	Interactions of Copper and Iron in Conversion Reactions of Nanosized Oxides with Large Variations in Iron-Copper Ratio. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A1383	3.9	9
9	Microstructure Evolution During Spark Plasma Sintering of Metastable (ZrO ₂ 8 mol% Y ₂ O ₃) 20 wt% Al ₂ O ₃ Composite Powders. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 2864-2870	3.8	15
8	Direct observation of molecular-level template action leading to self-assembly of a porous framework. <i>Chemistry - A European Journal</i> , 2010 , 16, 3926-32	4.8	99
7	Phase transitions of V-Mo-W mixed oxides during reduction/re-oxidation cycles. <i>Applied Catalysis A: General</i> , 2010 , 379, 155-165	5.1	8
6	Magnetic field assisted nanoparticle dispersion. <i>Chemical Communications</i> , 2009 , 47-9	5.8	19
5	Selective adsorption and separation of ortho-substituted alkylaromatics with the microporous aluminum terephthalate MIL-53. <i>Journal of the American Chemical Society</i> , 2008 , 130, 14170-8	16.4	345
4	LaMnO ₃ Perovskite Supported Noble Metal Catalysts for the Total Oxidation of Methane. <i>Chemical Engineering and Technology</i> , 2007 , 30, 889-894	2	37
3	Characterization of V-W and Mo-W Mixed Oxide Catalysts for the Selective Oxidation of Acrolein to Acrylic Acid. <i>Zeitschrift Fur Physikalische Chemie</i> , 2007 , 221, 1525-1548	3.1	8
2	Heterogeneously catalysed partial oxidation of acrolein to acrylic acid—structure, function and dynamics of the V-Mo-W mixed oxides. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 3577-89	3.6	68
1	Structural changes of vanadium-molybdenum-tungsten mixed oxide catalysts during the selective oxidation of acrolein to acrylic acid. <i>Journal of Molecular Catalysis A</i> , 2006 , 259, 309-318		34