

Michel L Trudeau

List of Publications by Year in descending order

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177
papers

6,485
citations

71102

41
h-index

82547

72
g-index

185
all docs

185
docs citations

185
times ranked

6960
citing authors

#	ARTICLE	IF	CITATIONS
1	Current density dependence of peroxide formation in the Li ⁺ /O ₂ battery and its effect on charge. Energy and Environmental Science, 2013, 6, 1772.	30.8	586
2	Hydrogen Storage for Mobility: A Review. Materials, 2019, 12, 1973.	2.9	461
3	Structural changes during high-energy ball milling of iron-based amorphous alloys: Is high-energy ball milling equivalent to a thermal process?. Physical Review Letters, 1990, 64, 99-102.	7.8	203
4	One-Step Overall Water Splitting under Visible Light Using Multiband InGaN/GaN Nanowire Heterostructures. ACS Nano, 2013, 7, 7886-7893.	14.6	190
5	Review and analysis of nanostructured olivine-based lithium rechargeable batteries: Status and trends. Journal of Power Sources, 2013, 232, 357-369.	7.8	173
6	Introductory remarks on nanodielectrics. IEEE Transactions on Dielectrics and Electrical Insulation, 2004, 11, 808-818.	2.9	158
7	Pyrolyzed Cobalt Phthalocyanine as Electrocatalyst for Oxygen Reduction. Journal of the Electrochemical Society, 1993, 140, 1974-1981.	2.9	131
8	A photochemical diode artificial photosynthesis system for unassisted high efficiency overall pure water splitting. Nature Communications, 2018, 9, 1707.	12.8	123
9	Low Hydrogen Overpotential Nanocrystalline Ni ₂ Mo Cathodes for Alkaline Water Electrolysis. Journal of the Electrochemical Society, 1991, 138, 1316-1321.	2.9	118
10	Hydrogen Storage in Chemically Reducible Mesoporous and Microporous Ti Oxides. Journal of the American Chemical Society, 2006, 128, 11740-11741.	13.7	108
11	Fabrication and properties of mechanically milled alumina/aluminum nanocomposites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7605-7614.	5.6	106
12	Atomic-Scale Origin of Long-Term Stability and High Performance of InGaN Nanowire Arrays for Photocatalytic Overall Pure Water Splitting. Advanced Materials, 2016, 28, 8388-8397.	21.0	106
13	Microstructure and physical properties of nanostructured tin oxide thin films grown by means of pulsed laser deposition. Thin Solid Films, 2002, 419, 230-236.	1.8	103
14	Amorphous and nanocrystalline Fe ₂ Ti prepared by ball milling. Journal of Materials Research, 1993, 8, 3059-3068.	2.6	94
15	H ₂ Storage Materials (22KJ/mol) Using Organometallic Ti Fragments as σ -H ₂ Binding Sites. Journal of the American Chemical Society, 2008, 130, 6992-6999.	13.7	86
16	Behavior of Solid Electrolyte in Li-Polymer Battery with NMC Cathode via in-Situ Scanning Electron Microscopy. Nano Letters, 2020, 20, 1607-1613.	9.1	85
17	XPS investigation of surface oxidation and reduction in nanocrystalline CexLa _{1-x} O _{2-y} . Surface and Interface Analysis, 1995, 23, 219-226.	1.8	83
18	Pulsed laser deposition of nanostructured tin oxide films for gas sensing applications. Sensors and Actuators B: Chemical, 2001, 77, 383-388.	7.8	79

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19	Nanocrystalline materials in catalysis and electrocatalysis: Structure tailoring and surface reactivity. <i>Scripta Materialia</i> , 1996, 7, 245-258.	0.5	73
20	Interdiffusion during the formation of amorphous alloys by mechanical alloying. <i>Physical Review Letters</i> , 1989, 62, 2849-2852.	7.8	72
21	Sulfated and Phosphated Mesoporous Nb Oxide in the Benzylolation of Anisole and Toluene by Benzyl Alcohol. <i>Journal of the American Chemical Society</i> , 2006, 128, 13996-13997.	13.7	67
22	High-resolution electron microscopy study of Ni ₃ Mo nanocrystals prepared by high-energy mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 134, 1361-1367.	5.6	64
23	Structural and magnetic characterization of granular Y ₁ Ba ₂ Cu ₃ O _{7-δ} nanocrystalline powders. <i>Journal of Materials Research</i> , 1994, 9, 535-540.	2.6	63
24	Nanocrystalline Fe-(Co,Ni)-Si-B: The mechanical crystallization of amorphous alloys and the effects on electrocatalytic reactions. <i>Physical Review B</i> , 1992, 45, 4626-4636.	3.2	62
25	New advanced cathode material: LiMnPO ₄ encapsulated with LiFePO ₄ . <i>Journal of Power Sources</i> , 2012, 204, 177-181.	7.8	58
26	Advanced Materials for Energy Storage. <i>MRS Bulletin</i> , 1999, 24, 23-26.	3.5	56
27	Nanocrystalline Ni-Mo alloys and their application in electrocatalysis. <i>Journal of Materials Research</i> , 1994, 9, 2998-3008.	2.6	55
28	Graphitization and particle size analysis of pyrolyzed cobalt phthalocyanine/carbon catalysts for oxygen reduction in fuel cells. <i>Journal of Materials Research</i> , 1994, 9, 3203-3209.	2.6	54
29	Redox Properties of Nanocrystalline Cu-Doped Cerium Oxide Studied by Isothermal Gravimetric Analysis and X-ray Photoelectron Spectroscopy. <i>Journal of Physical Chemistry B</i> , 1999, 103, 8858-8863.	2.6	54
30	In situ high-resolution transmission electron microscopy synthesis observation of nanostructured carbon coated LiFePO ₄ . <i>Journal of Power Sources</i> , 2011, 196, 7383-7394.	7.8	52
31	Sign reversal of the Hall coefficient in amorphous Ni-Zr alloys. <i>Physical Review B</i> , 1983, 27, 5955-5959.	3.2	51
32	Room-Temperature Ammonia Formation from Dinitrogen on a Reduced Mesoporous Titanium Oxide Surface with Metallic Properties. <i>Journal of the American Chemical Society</i> , 2002, 124, 9567-9573.	13.7	51
33	Evaluation of strain rate sensitivity by constant load nanoindentation. <i>Journal of Materials Science</i> , 2012, 47, 7189-7200.	3.7	51
34	Growth of carbon nanotubes on Ohmically heated carbon paper. <i>Chemical Physics Letters</i> , 2001, 342, 503-509.	2.6	50
35	Influence of Loading on the Activity and Stability of Heat-Treated Carbon-Supported Cobalt Phthalocyanine Electrocatalysts in Solid Polymer Electrolyte Fuel Cells. <i>Journal of the Electrochemical Society</i> , 1995, 142, 1162-1168.	2.9	49
36	Nanostructured polymer microcomposites: A distinct class of insulating materials. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2008, 15, 90-105.	2.9	49

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37	Making of an Industry-Friendly Artificial Photosynthesis Device. ACS Energy Letters, 2018, 3, 2230-2231.	17.4	48
38	Phase Changes and Electronic Properties in Toroidal Mesoporous Molybdenum Oxides. Angewandte Chemie - International Edition, 1999, 38, 1471-1475.	13.8	46
39	Synthesis and Electronic Properties of Potassium Fulleride Nanowires in a Mesoporous Niobium Oxide Host. Advanced Materials, 2001, 13, 29-33.	21.0	45
40	Nanocrystalline Fe and Fe-riched Fe-Ni through electrodeposition. Scripta Materialia, 1999, 12, 55-60.	0.5	44
41	Design and Synthesis of Vanadium Hydrazide Gels for Kubas-Type Hydrogen Adsorption: A New Class of Hydrogen Storage Materials. Journal of the American Chemical Society, 2010, 132, 11792-11798.	13.7	44
42	Ultra-low cost and highly stable hydrated FePO ₄ anodes for aqueous sodium-ion battery. Journal of Power Sources, 2018, 374, 211-216.	7.8	44
43	Positive Hall effect in paramagnetic amorphous Zr-Fe. Physical Review B, 1988, 37, 4499-4501.	3.2	43
44	Nanoporous twinned PtPd with highly catalytic activity and stability. Journal of Materials Chemistry A, 2015, 3, 2050-2056.	10.3	43
45	Group III-nitride nanowire structures for photocatalytic hydrogen evolution under visible light irradiation. APL Materials, 2015, 3, .	5.1	42
46	Weak-localization and Coulombic interaction effects in the low-temperature resistivity and magnetoresistivity of Y-Al metallic glasses. Physical Review B, 1986, 33, 2799-2802.	3.2	41
47	The Nature of Cobalt Species in Co ²⁺ /ZSM-5 NO Emission Control Catalysts. The Journal of Physical Chemistry, 1996, 100, 13662-13666.	2.9	41
48	Observation of a Double Maximum in the Dependence of Conductivity on Oxidation State in Potassium Fulleride Nanowires Supported by a Mesoporous Niobium Oxide Host Lattice. Advanced Materials, 2001, 13, 561-565.	21.0	41
49	High Resolution Imaging and X-Ray Microanalysis with STEM in the FE-SEM. Microscopy and Microanalysis, 2012, 18, 390-391.	0.4	41
50	A manganese hydride molecular sieve for practical hydrogen storage under ambient conditions. Energy and Environmental Science, 2019, 12, 1580-1591.	30.8	41
51	The Role of Metal Disulfide Interlayer in Li ⁺ /S Batteries. Journal of Physical Chemistry C, 2018, 122, 1014-1023.	3.1	40
52	Synthesis and Electronic Properties of Reduced Mesoporous Sodium Niobium Oxides. Advanced Materials, 2000, 12, 337-341.	21.0	39
53	Synthesis and Magnetic Tuning in Superparamagnetic Cobaltocene-Mesoporous Niobium Oxide Composites. Advanced Materials, 2000, 12, 1339-1342.	21.0	37
54	Synthesis and Characterization of a New Family of Electroactive Alkali Metal Doped Mesoporous Nb, Ta, and Ti Oxides and Evidence for an Anderson Transition in Reduced Mesoporous Titanium Oxide. Inorganic Chemistry, 2001, 40, 2088-2095.	4.0	36

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55	Hydride-Induced Amplification of Performance and Binding Enthalpies in Chromium Hydrazide Gels for Kubas-Type Hydrogen Storage. <i>Journal of the American Chemical Society</i> , 2011, 133, 15434-15443.	13.7	36
56	Hydrogen Storage in Microporous Titanium Oxides Reduced by Early Transition Metal Organometallic Sandwich Compounds. <i>Chemistry of Materials</i> , 2007, 19, 1388-1395.	6.7	35
57	High Capacity and High Efficiency Maple Tree-Biomass-Derived Hard Carbon as an Anode Material for Sodium-Ion Batteries. <i>Materials</i> , 2018, 11, 1294.	2.9	34
58	Nanostructured Gold Thin Films Prepared by Pulsed Laser Deposition. <i>Journal of Materials Research</i> , 2004, 19, 950-958.	2.6	33
59	Multifunctional Fe ₃ O ₄ @Au/Porous Silica@Fluorescein Core/Shell Nanoparticles with Enhanced Fluorescence Quantum Yield. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18313-18317.	3.1	33
60	Electronic Properties of Novel Mixed Oxidation-State Bis-Arene Chromium Nanowires Supported by a Mesoporous Niobium Oxide Host. <i>Advanced Materials</i> , 2000, 12, 1036-1040.	21.0	32
61	Electrochemical Studies of Hydrogen Storage in Amorphous Ni ₆₄ Zr ₃₆ Alloy. <i>Journal of the Electrochemical Society</i> , 1993, 140, 579-584.	2.9	31
62	Electroactive mesoporous tantalum oxide catalysts for nitrogen activation and ammonia synthesis. <i>Chemical Communications</i> , 2006, , 1918.	4.1	31
63	Synthesis of phase-pure Li ₂ MnSiO ₄ @C porous nanoboxes for high-capacity Li-ion battery cathodes. <i>Nano Energy</i> , 2015, 12, 305-313.	16.0	31
64	Hydrogen Absorption in Amorphous and Nano-Crystalline FeTi*. <i>Zeitschrift Fur Physikalische Chemie</i> , 1994, 183, 45-49.	2.8	30
65	Polymer composites with a large nanofiller content: a case study involving epoxy. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2014, 21, 434-443.	2.9	29
66	Microscopy and microanalysis of complex nanosized strengthening precipitates in new generation commercial Al-Cu-Li alloys. <i>Journal of Microscopy</i> , 2014, 255, 128-137.	1.8	28
67	Mechanically alloyed nanocrystalline Ni-Mo powders: A new technique for producing active electrodes for catalysis. <i>Applied Physics Letters</i> , 1991, 58, 2764-2766.	3.3	27
68	Deformation induced crystallization due to instability in amorphous FeZr alloys. <i>Applied Physics Letters</i> , 1994, 64, 3661-3663.	3.3	27
69	Acquisition parameters optimization of a transmission electron forward scatter diffraction system in a cold-field emission scanning electron microscope for nanomaterials characterization. <i>Scanning</i> , 2013, 35, 375-386.	1.5	27
70	Defect-engineered GaN:Mg nanowire arrays for overall water splitting under violet light. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	27
71	The oxidation of nanocrystalline FeTi hydrogen storage compounds. <i>Scripta Materialia</i> , 1992, 1, 457-464.	0.5	26
72	Compositional Effects in Ru, Pd, Pt, and Rh-Doped Mesoporous Tantalum Oxide Catalysts for Ammonia Synthesis. <i>Inorganic Chemistry</i> , 2007, 46, 5084-5092.	4.0	26

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73	Sulfated Mesoporous Tantalum Oxides in the Shape Selective Synthesis of Linear Alkyl Benzene. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 4896-4899.	13.8	26
74	Kubas-Type Hydrogen Storage in V(III) Polymers Using Tri- and Tetradentate Bridging Ligands. <i>Journal of the American Chemical Society</i> , 2011, 133, 4955-4964.	13.7	26
75	Nanoboxes with a porous MnO core and amorphous TiO ₂ shell as a mediator for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4952-4961.	10.3	26
76	Electrochemical and Electrocatalytic Behavior of an Iron-Based Amorphous Alloy in Alkaline Solutions at 70°C. <i>Journal of the Electrochemical Society</i> , 1989, 136, 2224-2230.	2.9	25
77	Mesostructured Fe Oxide Synthesized by Ligand-Assisted Templating with a Chelating Triol Surfactant. <i>Journal of Physical Chemistry B</i> , 2004, 108, 5211-5216.	2.6	24
78	Towards a more comprehensive microstructural analysis of Zr _{2.5} Nb pressure tubing using image analysis and electron backscattered diffraction (EBSD). <i>Journal of Nuclear Materials</i> , 2009, 393, 162-174.	2.7	24
79	Multivalent Manganese Hydrazide Gels for Kubas-Type Hydrogen Storage. <i>Chemistry of Materials</i> , 2012, 24, 1629-1638.	6.7	24
80	Thermodynamically neutral Kubas-type hydrogen storage using amorphous Cr(III) alkyl hydride gels. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9480-9487.	2.8	24
81	Layered oxides-LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ as anode electrode for symmetric rechargeable lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 378, 516-521.	7.8	24
82	Synthesis of a Stable Metallic Niobium Oxide Molecular Sieve and Subsequent Room Temperature Activation of Dinitrogen. <i>Advanced Functional Materials</i> , 2002, 12, 174.	14.9	22
83	Synthesis and Performance of MOF-Based Non-Noble Metal Catalysts for the Oxygen Reduction Reaction in Proton-Exchange Membrane Fuel Cells: A Review. <i>Nanomaterials</i> , 2020, 10, 1947.	4.1	22
84	Application of Magnetic Resonance Techniques to the In Situ Characterization of Li-Ion Batteries: A Review. <i>Materials</i> , 2020, 13, 1694.	2.9	22
85	Fabrication of nanocrystalline iron-based alloys by the mechanical crystallization of amorphous materials. <i>Scripta Materialia</i> , 1993, 2, 361-368.	0.5	21
86	Exchange-enhanced weak-localization and electron-electron interaction in amorphous paramagnetic Zr-Fe. <i>Physical Review B</i> , 1988, 38, 5353-5356.	3.2	20
87	X-ray Photoelectron Spectroscopy and Magnetic Studies on the Effect of Pore Size, Wall Thickness, and Wall Composition on Superparamagnetic Cobaltocene Mesoporous Nb, Ta, and Ti Composites. <i>Inorganic Chemistry</i> , 2000, 39, 5901-5908.	4.0	20
88	Contribution of a New Generation Field-Emission Scanning Electron Microscope in the Understanding of a 2099 Al-Li Alloy. <i>Microscopy and Microanalysis</i> , 2012, 18, 1393-1409.	0.4	20
89	Titanium hydrazide gels for Kubas-type hydrogen storage. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1947.	10.3	20
90	In Situ TEM Investigation of Electron Irradiation Induced Metastable States in Lithium-Ion Battery Cathodes: Li ₂ FeSiO ₄ versus LiFePO ₄ . <i>ACS Applied Energy Materials</i> , 2018, 1, 3180-3189.	5.1	20

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91	Magnetoresistivity studies of Zr-Amorphous alloys (M=Ni, Co, and Fe): From superconductivity to ferromagnetism. <i>Physical Review B</i> , 1990, 41, 10535-10544.	3.2	19
92	Optimization of hydrogen storage capacity in silica-supported low valent Ti systems exploiting Kubas binding of hydrogen. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 2793-2800.	1.8	19
93	Cyclopentadienyl chromium hydrazide gels for Kubas-type hydrogen storage. <i>Chemical Communications</i> , 2010, 46, 3206.	4.1	19
94	Application of Operando X-ray Diffractometry in Various Aspects of the Investigations of Lithium/Sodium-Ion Batteries. <i>Energies</i> , 2018, 11, 2963.	3.1	19
95	Multi-carbonyl molecules immobilized on high surface area carbon by diazonium chemistry for energy storage applications. <i>Electrochimica Acta</i> , 2019, 308, 99-114.	5.2	19
96	Hydrogen evolution on some Ni-base amorphous alloys in alkaline solution. <i>International Journal of Hydrogen Energy</i> , 1989, 14, 319-322.	7.1	18
97	The crystallization of amorphous Fe ₆₀ Co ₂₀ Si ₁₀ B ₁₀ and its effect on the electrocatalytic activity for H ₂ evolution. <i>Journal of Applied Physics</i> , 1990, 67, 2333-2342.	2.5	18
98	Superparamagnetic and spin glass behavior in mesoporous niobium oxide bis(cyclopentadienyl)nickel composites. <i>Journal of Materials Chemistry</i> , 2001, 11, 1755-1759.	6.7	18
99	Functionalized Porous Silicas with Unsaturated Early Transition Metal Moieties as Hydrogen Storage Materials: Comparison of Metal and Oxidation State. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8651-8660.	3.1	18
100	The hall effect in paramagnetic Co _{1-x} Zr metallic glasses. <i>Materials Science and Engineering</i> , 1988, 99, 187-190.	0.1	17
101	The contribution of strain and plastic deformations to the amorphization reaction of Ni _{1-x} Zr alloys by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 134, 1354-1360.	5.6	17
102	New Avenue for Limiting Degradation in NanoLi ₄ Ti ₅ O ₁₂ for Ultrafast-Charge Lithium-Ion Batteries: Hybrid Polymer-Inorganic Particles. <i>Nano Letters</i> , 2017, 17, 7372-7379.	9.1	17
103	Mesoporous Ta oxide reduced with bis(toluene)Ti: electronic properties and mechanistic considerations of nitrogen cleavage on the low valent surface. <i>Dalton Transactions</i> , 2003, , 4115-4120.	3.3	16
104	Solid-State ²³ Na and ⁷ Li NMR Investigations of Sodium- and Lithium-Reduced Mesoporous Titanium Oxides. <i>Inorganic Chemistry</i> , 2006, 45, 1828-1838.	4.0	16
105	Investigation of the catalytic activities of sulfated mesoporous Ti, Nb, and Ta oxides in 1-hexene isomerization. <i>Journal of Catalysis</i> , 2009, 266, 1-8.	6.2	16
106	Hollow Melon-Seed-Shaped Lithium Iron Phosphate Micro- and Sub-Micrometer Plates for Lithium-Ion Batteries. <i>ChemSusChem</i> , 2014, 7, 1618-1622.	6.8	16
107	Synthesis and Electronic Properties of Low-Dimensional Bis(benzene) Vanadium Reduced Mesoporous Niobium Oxide Composites. <i>Inorganic Chemistry</i> , 2001, 40, 6463-6468.	4.0	15
108	Synthesis and Electrochemistry of Li- and Na-Fulleride Doped Mesoporous Ta Oxides. <i>Chemistry of Materials</i> , 2004, 16, 2886-2894.	6.7	15

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109	Observation of TiH ₅ and TiH ₇ in Bulk-Phase TiH ₃ Gels for Kubas-Type Hydrogen Storage. <i>Chemistry of Materials</i> , 2013, 25, 4765-4771.	6.7	15
110	Unveiling the Cation Exchange Reaction between the NASICON Li _{1.5} Al _{0.5} Ge _{1.5} (PO ₄) ₃ Solid Electrolyte and the pyr13TFSI Ionic Liquid. <i>Journal of the American Chemical Society</i> , 2022, 144, 3442-3448.	13.7	15
111	Dye-sensitized InGaN nanowire arrays for efficient hydrogen production under visible light irradiation. <i>Nanotechnology</i> , 2015, 26, 285401.	2.6	14
112	The fcc to hcp transition induced by mechanical deformations in the Ni-Ru system. <i>Journal of Materials Research</i> , 1992, 7, 2412-2417.	2.6	13
113	Compositional Studies on the Electronic and Magnetic Properties of Potassium Fulleride Mesoporous Niobium Oxide Composites. <i>Chemistry of Materials</i> , 2002, 14, 2774-2781.	6.7	13
114	Hydrogen Storage in Mesoporous Titanium Oxide-Alkali Fulleride Composites. <i>Inorganic Chemistry</i> , 2008, 47, 2477-2484.	4.0	13
115	¹⁷ O and ¹⁵ N Solid State NMR Studies on Ligand-Assisted Templating and Oxygen Coordination in the Walls of Mesoporous Nb, Ta and Ti Oxides. <i>Journal of the American Chemical Society</i> , 2008, 130, 15726-15731.	13.7	13
116	Microstructural and electrochemical investigation of functional nanostructured TiO ₂ anode for Li-ions batteries. <i>Journal of Power Sources</i> , 2012, 202, 357-363.	7.8	13
117	Boosting Ultra-Fast Charge Battery Performance: Filling Porous nanoLi ₄ Ti ₅ O ₁₂ Particles with 3D Network of N-doped Carbons. <i>Scientific Reports</i> , 2019, 9, 16871.	3.3	13
118	On high-temperature evolution of passivation layer in Li-10 wt % Mg alloy via in situ SEM-EBSD. <i>Science Advances</i> , 2020, 6, .	10.3	13
119	Bis(cyclopentadienyl)chromium and Bis(cyclopentadienylvanadium) Composites of Mesoporous Niobium Oxide with Pseudo-One-Dimensional Organometallic Wires in the Pores. <i>Chemistry of Materials</i> , 2001, 13, 4808-4816.	6.7	12
120	Unusual Conductivity Patterns in Reduced Mesoporous Titanium, Niobium, and Tantalum Oxides with One-Dimensional Potassium Fulleride Wires in the Channels. <i>Chemistry of Materials</i> , 2001, 13, 2730-2741.	6.7	12
121	Mesoporous tantalum oxide photocatalysts for Schrauzer-type conversion of dinitrogen to ammonia. <i>Canadian Journal of Chemistry</i> , 2005, 83, 308-314.	1.1	12
122	Bis(benzene) and Bis(cyclopentadienyl) V and Cr Doped Mesoporous Silica with High Enthalpies of Hydrogen Adsorption. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17240-17246.	3.1	12
123	Compositional and ² H NMR Studies of Bis(benzene)chromium Composites of Mesoporous Vanadium-Niobium Mixed Oxides. <i>Inorganic Chemistry</i> , 2003, 42, 335-347.	4.0	11
124	Electronic Properties and Solid-State ⁸⁷ Rb and ¹³ C NMR Studies of Mesoporous Tantalum Oxide Rubidium Fulleride Composites. <i>Chemistry of Materials</i> , 2005, 17, 1467-1478.	6.7	11
125	A Solid-State ¹⁷ O NMR Study of Local Order and Crystallinity in Amine-Templated Mesoporous Nb Oxide. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 2635-2638.	13.8	11
126	Hall effect and magnetization of amorphous FeZr alloys. <i>Journal of Applied Physics</i> , 1984, 55, 1939-1941.	2.5	10

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127	Temperature and concentration variation of the Hall coefficient in amorphous Y-Al alloys. Physical Review B, 1989, 39, 13212-13217.	3.2	10
128	A versatile method for grafting polymers onto Li ₄ Ti ₅ O ₁₂ particles applicable to lithium-ion batteries. Journal of Power Sources, 2019, 421, 116-123.	7.8	10
129	Concentration and temperature dependence of the Hall resistivity in FeZr glasses. Journal of Applied Physics, 1985, 57, 3207-3209.	2.5	9
130	Structural and Spectroscopic Studies on Mesoporous Tantalum Oxide/Sodium Fulleride Composites with Conducting Fulleride Columns in the Pores. Advanced Functional Materials, 2003, 13, 671-681.	14.9	9
131	Synthesis and magnetic properties of decamethylsamarocene composites of mesoporous niobium oxide. Journal of Materials Chemistry, 2003, 13, 75-79.	6.7	9
132	On the path to bulk FeH ₂ : Synthesis and magnetic properties of amorphous iron (II) hydride. Journal of Alloys and Compounds, 2014, 590, 199-204.	5.5	9
133	Variable temperature proton conductivity of mesoporous titanium oxides doped with naphthalene sulfonate formaldehyde resin. Microporous and Mesoporous Materials, 2014, 190, 284-291.	4.4	9
134	Anisotropic electron diffusion and weak localization in Cu/Al multilayers. Physical Review B, 1993, 48, 12202-12216.	3.2	8
135	Electrochemical Studies of Amorphous Ni ₆₄ Zr ₃₆ Hydride Electrodes*. Zeitschrift Fur Physikalische Chemie, 1994, 183, 365-370.	2.8	8
136	Protection of LiFePO ₄ against Moisture. Materials, 2020, 13, 942.	2.9	8
137	Thermal evolution of NASICON type solid-state electrolytes with lithium at high temperature via in situ scanning electron microscopy. Chemical Communications, 2021, 57, 11076-11079.	4.1	8
138	Engineering nanocrystalline materials from amorphous precursors. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 204, 233-239.	5.6	7
139	Variations in nanomechanical properties of back-end Zr _{2.5} Nb pressure tube material. Journal of Nuclear Materials, 2013, 442, 116-123.	2.7	7
140	Determination of Binary Diffusivities in Concentrated Lithium Battery Electrolytes via NMR and Conductivity Measurements. Journal of Physical Chemistry C, 2020, 124, 24624-24630.	3.1	7
141	A low-cost and Li-rich organic coating on a Li ₄ Ti ₅ O ₁₂ anode material enabling Li-ion battery cycling at subzero temperatures. Materials Advances, 2020, 1, 854-872.	5.4	7
142	Design Parameters for Enhanced Performance of Li _{1+x} Ni _{0.6} Co _{0.2} Mn _{0.2} O ₂ at High Voltage: A Phase Transformation Study by In Situ XRD. Journal of the Electrochemical Society, 2021, 168, 100526.	2.9	7
143	Proton Conductivity of Naphthalene Sulfonate Formaldehyde Resin-Doped Mesoporous Niobium and Tantalum Oxide Composites. ChemSusChem, 2015, 8, 301-309.	6.8	6
144	High-Pressure Raman and Calorimetry Studies of Vanadium(III) Alkyl Hydrides for Kubas-type Hydrogen Storage. ChemPhysChem, 2016, 17, 822-828.	2.1	6

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146	Electrochemical properties of rapidly quenched amorphous Ni ₄₀ Zr metallic ribbons and mechanically alloyed Ni ₄₀ Zr amorphous powders. International Journal of Hydrogen Energy, 1990, 15, 287-289.	7.1	5
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