

Marlies Van Bael

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.

212 papers	3,649 citations	31 h-index	46 g-index
225 ext. papers	4,028 ext. citations	4.7 avg, IF	4.9 L-index

#	Paper	IF	Citations
212	Comparing the Performance of Supported Ru Nanocatalysts Prepared by Chemical Reduction of RuCl ₃ and Thermal Decomposition of Ru ₃ (CO) ₁₂ in the Sunlight-Powered Sabatier Reaction. <i>Catalysts</i> , 2022 , 12, 284	4	0
211	The impact of bead milling on the thermodynamics and kinetics of the structural phase transition of VO ₂ particulate materials and their potential for use in thermochromic glazing. <i>Solar Energy Materials and Solar Cells</i> , 2022 , 242, 111783	6.4	
210	Fracture-induced aging anomalies in LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ electrodes. <i>Electrochemistry Communications</i> , 2021 , 132, 107134	5.1	0
209	Probing the impact of material properties of core-shell SiO ₂ @TiO ₂ spheres on the plasma-catalytic CO ₂ dissociation using a packed bed DBD plasma reactor. <i>Journal of CO₂ Utilization</i> , 2021 , 46, 101468	7.6	4
208	A comparative study on the switching kinetics of W/VO ₂ powders and VO ₂ coatings and their implications for thermochromic glazing. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 224, 110977	6.4	4
207	Dielectric Barrier Discharge (DBD) Plasma Coating of Sulfur for Mitigation of Capacity Fade in Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 28072-28089	9.5	3
206	Nanodiamond seeding on plasma-treated tantalum thin films and the role of surface contamination. <i>Applied Surface Science</i> , 2021 , 538, 148016	6.7	9
205	LiNi _{0.5} Mn _{1.5} O ₄ - γ -LNMO) as Co-free cathode for lithium ion batteries via solution-gel synthesis: Particle size and morphology investigation. <i>Journal of Alloys and Compounds</i> , 2021 , 892, 162175	5.7	1
204	Kinetic Analysis of the Redox Reaction in an Aqueous Vanadium Oxalate System. <i>Journal of Chemical Education</i> , 2020 , 97, 1650-1654	2.4	1
203	An in-depth study of Sn substitution in Li-rich/Mn-rich NMC as a cathode material for Li-ion batteries. <i>Dalton Transactions</i> , 2020 , 49, 10486-10497	4.3	4
202	Precursor Design Strategies for the Low-Temperature Synthesis of Functional Oxides: It's All in the Chemistry. <i>Chemistry - A European Journal</i> , 2020 , 26, 9070-9083	4.8	3
201	Nanostructure stabilization by low-temperature dopant pinning in multiferroic BiFeO ₃ -based thin films produced by aqueous chemical solution deposition. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 4234-4245	7.1	7
200	Polymeric Backbone Eutectogels as a New Generation of Hybrid Solid-State Electrolytes. <i>Chemistry of Materials</i> , 2020 , 32, 3783-3793	9.6	22
199	The impact of polymeric binder on the morphology and performances of sulfur electrodes in lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2020 , 360, 136993	6.7	5
198	Collective photothermal effect of Al ₂ O ₃ -supported spheroidal plasmonic Ru nanoparticle catalysts in the sunlight-powered Sabatier reaction. <i>ChemCatChem</i> , 2020 , 12, 5618-5622	5.2	10
197	Constructive versus Destructive Heterogeneity in Porous Electrodes of Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 11820-11829	6.1	7
196	Photo-induced copper-mediated (meth)acrylate polymerization towards graphene oxide and reduced graphene oxide modification. <i>European Polymer Journal</i> , 2020 , 134, 109810	5.2	3

195	Construction of a Room-Temperature Eutectic Binary Phase Diagram by Use of Differential Scanning Calorimetry. <i>Journal of Chemical Education</i> , 2020 , 97, 2265-2272	2.4	2
194	In Situ Mechanical Analysis of the Nanoscopic Solid Electrolyte Interphase on Anodes of Li-Ion Batteries. <i>Advanced Science</i> , 2019 , 6, 1900190	13.6	17
193	Sunlight-Fueled, Low-Temperature Ru-Catalyzed Conversion of CO and H to CH with a High Photon-to-Methane Efficiency. <i>ACS Omega</i> , 2019 , 4, 7369-7377	3.9	18
192	Eu ³⁺ - Doped Ln ₃ Al ₅ O ₁₂ (Ln = Er, Tm, Yb, Lu) garnets: Synthesis, characterization and investigation of structural and luminescence properties. <i>Journal of Luminescence</i> , 2019 , 212, 14-22	3.8	9
191	Toward unlocking the Mn ³⁺ /Mn ²⁺ redox pair in alluaudite-type Na ₂ +2zMn ₂ (SO ₄) ₃ (SeO ₄) _x cathodes for sodium-ion batteries. <i>Journal of Solid State Chemistry</i> , 2019 , 277, 804-810	3.3	1
190	Effectiveness of Ligand Denticity-Dependent Oxidation Protection in Copper MOD Inks. <i>Langmuir</i> , 2019 , 35, 16101-16110	4	5
189	Reversible Surface Engineering via Nitrene-Mediated Radical Coupling. <i>Langmuir</i> , 2018 , 34, 3244-3255	4	2
188	Ti surface doping of LiNiMnO positive electrodes for lithium ion batteries.. <i>RSC Advances</i> , 2018 , 8, 7287-7300	7.3	22
187	Eu ³⁺ -Doped Y ₃ SmxAl ₅ O ₁₂ garnet: synthesis and structural investigation. <i>New Journal of Chemistry</i> , 2018 , 42, 2278-2287	3.6	9
186	Eutectogels: A New Class of Solid Composite Electrolytes for Li/Li-Ion Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 655-662	9.6	51
185	Thin film composites in the BiFeO ₃ /Bi ₄ Ti ₃ O ₁₂ system obtained by an aqueous solution-gel deposition methodology. <i>Boletín De La Sociedad Española De Cerámica Y Vidrio</i> , 2018 , 57, 19-28	1.9	5
184	Screen-printing of flexible semi-transparent electrodes and devices based on silver nanowire networks. <i>Nanotechnology</i> , 2018 , 29, 425201	3.4	6
183	Aqueous solution-based synthesis and deposition of crystalline In-Ga-Zn-oxide films with an enhanced mobility. <i>Journal of Sol-Gel Science and Technology</i> , 2018 , 87, 310-318	2.3	
182	Microstructural Effect on the Enhancement of Field Electron Emission Properties of Nanocrystalline Diamond Films by Li-Ion Implantation and Annealing Processes. <i>ACS Omega</i> , 2018 , 3, 9956-9965	3.9	6
181	Fabrication, microstructure, and enhanced thermionic electron emission properties of vertically aligned nitrogen-doped nanocrystalline diamond nanorods. <i>MRS Communications</i> , 2018 , 8, 1311-1320	2.7	1
180	Understanding the Importance of Cu(I) Intermediates in Self-Reducing Molecular Inks for Flexible Electronics. <i>Inorganic Chemistry</i> , 2018 , 57, 15205-15215	5.1	10
179	Reduced Na ₂ +xTi ₄ O ₉ /C Composite: A Durable Anode for Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2018 , 30, 8521-8527	9.6	6
178	Morphology-induced spin frustration in granular BiFeO ₃ thin films: Origin of the magnetic vertical shift. <i>Applied Physics Letters</i> , 2018 , 113, 142402	3.4	2

177	Low Temperature Synthesis of Lithium-Doped Nanocrystalline Diamond Films with Enhanced Field Electron Emission Properties. <i>Nanomaterials</i> , 2018 , 8,	5.4	4
176	Direct nucleation of hexagonal boron nitride on diamond: Crystalline properties of hBN nanowalls. <i>Acta Materialia</i> , 2017 , 127, 17-24	8.4	5
175	3D indium tin oxide electrodes by ultrasonic spray deposition for current collection applications. <i>Journal of Power Sources</i> , 2017 , 348, 130-137	8.9	3
174	Ultrasonically spray coated silver layers from designed precursor inks for flexible electronics. <i>Nanotechnology</i> , 2017 , 28, 215202	3.4	7
173	Vertically aligned diamond-graphite hybrid nanorod arrays with superior field electron emission properties. <i>APL Materials</i> , 2017 , 5, 066102	5.7	13
172	Probing the flat band potential and effective electronic carrier density in vertically aligned nitrogen doped diamond nanorods via electrochemical method. <i>Electrochimica Acta</i> , 2017 , 246, 68-74	6.7	11
171	Combustion synthesis as a low temperature route to Li ₄ Ti ₅ O ₁₂ based powders for lithium ion battery anodes. <i>RSC Advances</i> , 2017 , 7, 18745-18754	3.7	7
170	Enhancement of plasma illumination characteristics of few-layer graphene-diamond nanorods hybrid. <i>Nanotechnology</i> , 2017 , 28, 065701	3.4	9
169	Remarkable lowering in the synthesis temperature of LiMnO ₂ via citrate solution-gel synthesis facilitated by ethanol. <i>Dalton Transactions</i> , 2017 , 46, 14934-14946	4.3	3
168	A novel explanation for the increased conductivity in annealed Al-doped ZnO: an insight into migration of aluminum and displacement of zinc. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27866-27877	3.6	23
167	Steering the Properties of MoO _x Hole Transporting Layers in OPVs and OLEDs: Interface Morphology vs. Electronic Structure. <i>Materials</i> , 2017 , 10,	3.5	4
166	Aqueous solution gel precursors for LiFePO ₄ lithium ion battery cathodes, their decomposition and phase formation. <i>Journal of Sol-Gel Science and Technology</i> , 2017 , 84, 198-205	2.3	4
165	Field electron emission enhancement in lithium implanted and annealed nitrogen-incorporated nanocrystalline diamond films. <i>Applied Physics Letters</i> , 2017 , 110, 261602	3.4	11
164	On the Origin of Diamond Plates Deposited at Low Temperature. <i>Crystal Growth and Design</i> , 2017 , 17, 4306-4314	3.5	14
163	Aqueous chemical solution deposition of ultra high-k LuFeO ₃ thin films. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 611-617	6	2
162	The pressure sensitivity of wrinkled B-doped nanocrystalline diamond membranes. <i>Scientific Reports</i> , 2016 , 6, 35667	4.9	14
161	Enhanced optoelectronic performances of vertically aligned hexagonal boron nitride nanowalls-nanocrystalline diamond heterostructures. <i>Scientific Reports</i> , 2016 , 6, 29444	4.9	11
160	Ultrasonic Spray Deposition of Metal Oxide Films on High Aspect Ratio Microstructures for Three-Dimensional All-Solid-State Li-ion Batteries. <i>ACS Energy Letters</i> , 2016 , 1, 1184-1188	20.1	10

159	Low-Temperature Photochemical Solution Deposition of Ferroelectric and Multiferroic Thin Films 2016 , 163-199		4
158	Effect of annealing atmosphere on LiMn2O4 for thin film Li-ion batteries from aqueous chemical solution deposition. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 18457-18469	13	17
157	Growth, structural and plasma illumination properties of nanocrystalline diamond-decorated graphene nanoflakes. <i>RSC Advances</i> , 2016 , 6, 63178-63184	3.7	12
156	From liquid to thin film: colloidal suspensions for tungsten oxide as an electrode material for Li-ion batteries. <i>RSC Advances</i> , 2016 , 6, 51747-51756	3.7	6
155	Elucidation of the Growth Mechanism of Sputtered 2D Hexagonal Boron Nitride Nanowalls. <i>Crystal Growth and Design</i> , 2016 , 16, 3699-3708	3.5	10
154	CVD diamond growth from nanodiamond seeds buried under a thin chromium layer. <i>Diamond and Related Materials</i> , 2016 , 64, 163-168	3.5	9
153	Photoluminescence of Pr 3+ -doped calcium and strontium stannates. <i>Journal of Luminescence</i> , 2016 , 172, 323-330	3.8	28
152	A study on the thermal sintering process of silver nanoparticle inkjet inks to achieve smooth and highly conducting silver layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 1403-1409	1.6	19
151	Hierarchical hexagonal boron nitride nanowall/diamond nanorod heterostructures with enhanced optoelectronic performance. <i>RSC Advances</i> , 2016 , 6, 90338-90346	3.7	5
150	Gaining new insight into low-temperature aqueous photochemical solution deposited ferroelectric PbTiO3 films. <i>Materials Chemistry and Physics</i> , 2016 , 174, 28-40	4.4	4
149	Amorphous and perovskite Li3xLa(2/3)1-xTiO3 (thin) films via chemical solution deposition: solid electrolytes for all-solid-state Li-ion batteries. <i>Journal of Sol-Gel Science and Technology</i> , 2015 , 73, 536-543	2.3	11
148	Morphological TEM studies and magnetoresistance analysis of sputtered Al-substituted ZnO films: The role of oxygen. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1191-1201	1.6	1
147	BiFeO3 thin films via aqueous solution deposition: a study of phase formation and stabilization. <i>Journal of Materials Science</i> , 2015 , 50, 4463-4476	4.3	8
146	Chemical composition of an aqueous oxalato-/citrate-VO(2+) solution as determinant for vanadium oxide phase formation. <i>Inorganic Chemistry</i> , 2015 , 54, 69-78	5.1	5
145	Sol-Gel Deposition of Ultrathin High-Dielectric Films 2015 , 767-786		
144	Increasing the Solubility Limit for Tetrahedral Aluminium in ZnO:Al Nanorods by Variation in Synthesis Parameters. <i>Journal of Nanomaterials</i> , 2015 , 2015, 1-8	3.2	4
143	Improved nanodiamond seeding on chromium by surface plasma pretreatment. <i>Chemical Physics Letters</i> , 2015 , 640, 50-54	2.5	7
142	Combustion deposition of MoO3 films: from fundamentals to OPV applications. <i>RSC Advances</i> , 2015 , 5, 91349-91362	3.7	14

141	ZnO-Based Sunscreen: The Perfect Example To Introduce Nanoparticles in an Undergraduate or High School Chemistry Lab. <i>Journal of Chemical Education</i> , 2014 , 91, 259-263	2.4	20
140	Influence of hydrogen and hydrogen/methane plasmas on AlN thin films. <i>Applied Physics Letters</i> , 2014 , 104, 081917	3.4	5
139	Transparent conducting oxide films of group V doped titania prepared by aqueous chemical solution deposition. <i>Thin Solid Films</i> , 2014 , 555, 33-38	2.2	13
138	Annealing of sulfide stabilized colloidal semiconductor nanocrystals. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 178-183	7.1	7
137	A UV-absorber bismuth(III)-N-methyldiethanolamine complex as a low-temperature precursor for bismuth-based oxide thin films. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8750-8760	7.1	21
136	Homopolymers as nanocarriers for the loading of block copolymer micelles with metal salts: a facile way to large-scale ordered arrays of transition-metal nanoparticles. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 701-707	7.1	5
135	Aqueous citrato-oxovanadate(IV) precursor solutions for VO ₂ : synthesis, spectroscopic investigation and thermal analysis. <i>Dalton Transactions</i> , 2014 , 43, 12614-23	4.3	15
134	Factors Influencing the Conductivity of Aqueous Sol(ution)-Gel-Processed Al-Doped ZnO Films. <i>Chemistry of Materials</i> , 2014 , 26, 5839-5851	9.6	27
133	Luminescence properties of Sm ³⁺ -doped alkaline earth ortho-stannates. <i>Optical Materials</i> , 2014 , 36, 1146-1152	3.3	26
132	Substitutional phosphorus incorporation in nanocrystalline CVD diamond thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014 , 8, 705-709	2.5	17
131	Relation between synthesis conditions, dopant position and charge carriers in aluminium-doped ZnO nanoparticles. <i>RSC Advances</i> , 2013 , 3, 15254	3.7	29
130	Thermal decomposition synthesis of Al-doped ZnO nanoparticles: an in-depth study. <i>RSC Advances</i> , 2013 , 3, 23745	3.7	11
129	The use of XAFS to determine the nature of interaction of iron and molybdenum metal salts within PS-b-P2VP micelles. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 1675-81	3.6	3
128	Crystal structure and magnetic properties of the Cr-doped spiral antiferromagnet BiMnFe ₂ O ₆ . <i>Materials Research Bulletin</i> , 2013 , 48, 2993-2997	5.1	3
127	Hydrothermal synthesis of a concentrated and stable dispersion of TiO ₂ nanoparticles. <i>Chemical Engineering Journal</i> , 2013 , 223, 135-144	14.7	28
126	V ₆ O ₁₃ films by control of the oxidation state from aqueous precursor to crystalline phase. <i>Dalton Transactions</i> , 2013 , 42, 959-68	4.3	21
125	Surface plasma pretreatment for enhanced diamond nucleation on AlN. <i>Applied Physics Letters</i> , 2013 , 102, 201609	3.4	20
124	Influence of fullerene photodimerization on the PCBM crystallization in polymer: Fullerene bulk heterojunctions under thermal stress. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013 , 51, 1209-1214	2.6	64

123	Preparation of epitaxial films of the transparent conductive oxide Al:ZnO by reactive high-pressure sputtering in Ar/O ₂ mixtures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 1013-1018 ^{1,6} 2		
122	Investigation of the ferroelectric relaxor crossover in Ce-doped BaTiO ₃ ceramics by impedance spectroscopy and Raman study. <i>Phase Transitions</i> , 2013 , 86, 703-714	1.3	31
121	Aqueous Precursor Systems 2013 , 93-140		5
120	Properties and thermal stability of solution processed ultrathin, high-k bismuth titanate (Bi ₂ Ti ₂ O ₇) films. <i>Materials Research Bulletin</i> , 2012 , 47, 511-517	5.1	15
119	Preparation and benchmarking of thin film supported PTMSP-silica pervaporation membranes. <i>Journal of Membrane Science</i> , 2012 , 389, 265-271	9.6	97
118	Crosslinked poly[1-(trimethylsilyl)-1-propyne] membranes: Characterization and pervaporation of aqueous tetrahydrofuran mixtures. <i>Journal of Membrane Science</i> , 2012 , 389, 459-469	9.6	13
117	SnO ₂ thin films from an aqueous citrato peroxo Sn(IV) precursor. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 62, 57-64	2.3	16
116	Dewetting of Patterned Silicon Substrates Leading to a Selective Deposition of Micellar-Based Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 10743-10752	3.8	2
115	Gadolinium -niobates and -tantallates: Amorphous High-k Materials by Aqueous CSD. <i>Journal of the Electrochemical Society</i> , 2012 , 159, G75-G79	3.9	5
114	Fully water-processable metal oxide nanorods/polymer hybrid solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 107, 230-235	6.4	17
113	Sol-gel (combustion) synthesis and characterization of different alkaline earth metal (Ca, Sr, Ba) stannates. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 64, 643-652	2.3	38
112	Solution derived ZnO:Al films with low resistivity. <i>Thin Solid Films</i> , 2012 , 524, 81-85	2.2	12
111	REMOVED: Free Volume Expansion and Enhanced Performance in Pervaporation of Supercritical Carbon Dioxide Treated Poly[1-(Trimethylsilyl)-1-Propyne] Membranes. <i>Procedia Engineering</i> , 2012 , 44, 1119-1120		
110	Analytical TEM study of CVD diamond growth on TiO ₂ sol-gel layers. <i>Diamond and Related Materials</i> , 2012 , 23, 93-99	3.5	13
109	Generalized approach to the description of recombination kinetics in bulk heterojunction solar cells extending from fully organic to hybrid solar cells. <i>Applied Physics Letters</i> , 2012 , 100, 203905	3.4	5
108	Relation between Morphology and Recombination Kinetics in Nanostructured Hybrid Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 14237-14242	3.8	14
107	Towards high-performance biopackaging: barrier and mechanical properties of dual-action polycaprolactone/zinc oxide nanocomposites. <i>Polymers for Advanced Technologies</i> , 2012 , 23, 1422-1428 ^{3,2} 21		
106	Tuning the dimensions of ZnO nanorod arrays for application in hybrid photovoltaics. <i>ChemPhysChem</i> , 2012 , 13, 2777-83	3.2	14

105	Aqueous solutions for low-temperature photoannealing of functional oxide films: reaching the 400 °C Si-technology integration barrier. <i>Journal of the American Chemical Society</i> , 2011 , 133, 12922-5	16.4	30
104	Layered perovskite-like Pb ₂ Fe ₂ O ₅ structure as a parent matrix for the nucleation and growth of crystallographic shear planes. <i>Inorganic Chemistry</i> , 2011 , 50, 4978-86	5.1	16
103	Enhanced performance in pervaporation of supercritical carbon dioxide treated poly[1-(trimethylsilyl)-1-propyne] membranes. <i>Journal of Membrane Science</i> , 2011 , 382, 177-185	9.6	2
102	Towards efficient hybrid solar cells based on fully polymer infiltrated ZnO nanorod arrays. <i>Advanced Materials</i> , 2011 , 23, 2802-5	24	99
101	Self-assembled multilayers of vertically aligned semiconductor nanorods on device-scale areas. <i>Advanced Materials</i> , 2011 , 23, 2205-9	24	77
100	Influence of incorporation of ZnO nanoparticles and biaxial orientation on mechanical and oxygen barrier properties of polypropylene films for food packaging applications. <i>Journal of Applied Polymer Science</i> , 2011 , 120, 1616-1623	2.9	55
99	Free Volume Expansion of Poly[1-(trimethylsilyl)-1-propyne] Treated in Supercritical Carbon Dioxide As Revealed by Positron Annihilation Lifetime Spectroscopy. <i>Macromolecules</i> , 2011 , 44, 2766-2772	5.5	14
98	Influence of Interface Morphology onto the Photovoltaic Properties of Nanopatterned ZnO/Poly(3-hexylthiophene) Hybrid Solar Cells. An Impedance Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 16695-16700	3.8	40
97	Interfacial reactions of Gd- and Nb-oxide based high-k layers deposited by aqueous chemical solution deposition. <i>Microelectronic Engineering</i> , 2011 , 88, 1338-1341	2.5	5
96	Thermal decomposition and spectroscopic investigation of a new aqueous glycolato(-peroxo) Ti(IV) solution/gel precursor. <i>Thermochimica Acta</i> , 2011 , 520, 121-133	2.9	17
95	Stabilization of ambient sensitive atomic layer deposited lanthanum aluminates by annealing and in situ capping. <i>Applied Physics Letters</i> , 2011 , 98, 102904	3.4	11
94	Comparison of Two Novel Solution-Based Routes for the Synthesis of Equiaxed ZnO Nanoparticles. <i>Journal of Nanomaterials</i> , 2011 , 2011, 1-6	3.2	14
93	Properties of Ultrathin High Permittivity (Nb _{1-x} Ta _x) ₂ O ₅ Films Prepared by Aqueous Chemical Solution Deposition. <i>Journal of the Electrochemical Society</i> , 2010 , 157, G13	3.9	6
92	(Invited) Rare Earth Materials for Semiconductor Applications. <i>ECS Transactions</i> , 2010 , 28, 155-164	1	3
91	Dielectric Response of Ta ₂ O ₅ , Nb ₂ O ₅ , and NbTaO ₅ from First-Principles Investigations. <i>Journal of the Electrochemical Society</i> , 2010 , 157, G20	3.9	30
90	Atomic Layer Deposition of Gd-Doped HfO ₂ Thin Films. <i>Journal of the Electrochemical Society</i> , 2010 , 157, G105	3.9	42
89	Evolution of Metal-Trifluoroacetate Precursors in the Thermal Decomposition toward High-Performance YBa ₂ Cu ₃ O ₇ Superconducting Films. <i>Chemistry of Materials</i> , 2010 , 22, 1686-1694	9.6	70
88	Atomic Layer Deposition of Gadolinium Aluminate using Gd(iPrCp) ₃ , TMA, and O ₃ or H ₂ O. <i>Chemical Vapor Deposition</i> , 2010 , 16, 170-178		20

87	High flux composite PTMSP-silica nanohybrid membranes for the pervaporation of ethanol/water mixtures. <i>Journal of Membrane Science</i> , 2010 , 351, 160-167	9.6	68
86	Strontium niobate high-k dielectrics: Film deposition and material properties. <i>Acta Materialia</i> , 2010 , 58, 216-225	8.4	9
85	Deposition of functionalized gold nanoparticles onto modified silicon substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 864-871	1.6	2
84	Hydrothermal synthesis of ZnO nanorods: a statistical determination of the significant parameters in view of reducing the diameter. <i>Nanotechnology</i> , 2009 , 20, 055608	3.4	33
83	Crystallization of alkaline earth zirconates and niobates from compositionally flexible aqueous solution-gel syntheses. <i>Materials Research Bulletin</i> , 2009 , 44, 734-740	5.1	8
82	Diamond Nucleation by Carbon Transport from Buried Nanodiamond TiO ₂ Sol-Gel Composites. <i>Advanced Materials</i> , 2009 , 21, 670-673	24	27
81	Hyphenated thermal analysis for in situ study of (Bi,Nd) ₄ Ti ₃ O ₁₂ formation from aqueous solution-gel synthesis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2009 , 96, 955-960	4.1	5
80	Morphology of water-based chemical solution deposition (CSD) lead titanate films on different substrates: Towards island formation. <i>Journal of the European Ceramic Society</i> , 2009 , 29, 1703-1711	6	10
79	Effects of precursor chemistry and thermal treatment conditions on obtaining phase pure bismuth ferrite from aqueous gel precursors. <i>Journal of the European Ceramic Society</i> , 2009 , 29, 3007-3013	6	58
78	Thermal behaviour of arsenic trioxide adsorbed on activated carbon. <i>Journal of Hazardous Materials</i> , 2009 , 166, 1238-43	12.8	20
77	Study of interfacial reactions and phase stabilization of mixed Sc, Dy, Hf high-k oxides by attenuated total reflectance infrared spectroscopy. <i>Applied Surface Science</i> , 2009 , 255, 7812-7817	6.7	33
76	Crystallization resistance of barium titanate zirconate ultrathin films from aqueous CSD: a study of cause and effect. <i>Journal of Materials Chemistry</i> , 2009 , 19, 1115		8
75	Alternative high-k dielectrics for semiconductor applications. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 209		10
74	Impact of Process Optimizations on the Electrical Performance of High-k Layers Deposited by Aqueous Chemical Solution Deposition. <i>Journal of the Electrochemical Society</i> , 2008 , 155, G91	3.9	23
73	Structural and optical properties of DNA layers covalently attached to diamond surfaces. <i>Langmuir</i> , 2008 , 24, 7269-77	4	35
72	Ground-state charge-transfer complex formation in hybrid poly(3-hexyl thiophene):titanium dioxide solar cells. <i>Applied Physics Letters</i> , 2008 , 93, 223302	3.4	33
71	In pursuit of SuperHigh-k ternary oxides: aqueous CSD and material properties. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1073, 1		
70	Synthesis and mechanical and tribological characterization of alumina/zirconia stabilized zirconia (YSZ) nanocomposites with YSZ synthesized by means of an aqueous solution-gel method or a hydrothermal route. <i>Ceramics International</i> , 2008 , 34, 1315-1325	5.1	9

69	Synthesis of platelet-shaped boehmite and alumina nanoparticles via an aqueous route. <i>Ceramics International</i> , 2008 , 34, 1971-1974	5.1	27
68	Water based preparation method for green solid-state polythiophene solar cells. <i>Thin Solid Films</i> , 2008 , 516, 7245-7250	2.2	17
67	Aqueous solution gel preparation of ultrathin ZrO ₂ films for gate dielectric application. <i>Thin Solid Films</i> , 2008 , 516, 8343-8351	2.2	21
66	Aqueous Chemical Solution Deposition of Ferroelectric Ti ₄ +Co substituted (Bi,Lu) ₄ Ti ₃ O ₁₂ Thin Films. <i>Chemistry of Materials</i> , 2007 , 19, 2994-3001	9.6	14
65	Study of the decomposition of aqueous citratoperoxo-Ti(IV)-gel precursors for titania by means of TGA-MS and FTIR. <i>Thermochimica Acta</i> , 2007 , 456, 38-47	2.9	27
64	Influence of synthesis parameters on morphology and phase composition of porous titania layers prepared via water based chemical solution deposition. <i>Journal of the European Ceramic Society</i> , 2007 , 27, 4537-4546	6	15
63	Preparation of a porous nanocrystalline TiO ₂ layer by deposition of hydrothermally synthesized nanoparticles. <i>Journal of the European Ceramic Society</i> , 2007 , 27, 4529-4535	6	18
62	Tanalith E 3494 impregnated wood: Characterisation and thermal behaviour. <i>Journal of Analytical and Applied Pyrolysis</i> , 2007 , 78, 133-139	6	8
61	Synthesis of ZnO nanorods from aqueous solution. <i>Materials Letters</i> , 2007 , 61, 2624-2627	3.3	90
60	Synthesis of thin dense titania films via an aqueous solution-gel method. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 41, 43-48	2.3	38
59	Effect of La ³⁺ content on the properties of ferroelectric Bi ₄ La _x Ti ₃ O ₁₂ (BLT) thin films prepared by aqueous chemical solution deposition. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 42, 239-245	2.3	6
58	Preparation of nanocrystalline titania films with different porosity by water-based chemical solution deposition. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 43, 291-297	2.3	12
57	An aqueous solution gel citratoperoxo-Ti(IV) precursor: synthesis, gelation, thermo-oxidative decomposition and oxide crystallization. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 44, 65-74	2.3	44
56	The aqueous solution-gel synthesis of perovskite Pb(Zr _{1-x} Ti _x)O ₃ (PZT). <i>Journal of Materials Science</i> , 2007 , 42, 624-632	4.3	23
55	Aqueous Chemical Solution Deposition. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, G15		16
54	Aqueous chemical solution deposition of ultrathin lanthanide oxide dielectric films. <i>Journal of Materials Research</i> , 2007 , 22, 3484-3493	2.5	18
53	Screening of High-k Layers in MIS and MIM Capacitors Using Aqueous Chemical Solution Deposition. <i>ECS Transactions</i> , 2007 , 11, 299-310	1	2
52	H ₂ S exposure of a (100)Ge surface: Evidences for a (2×1) electrically passivated surface. <i>Applied Physics Letters</i> , 2007 , 90, 222105	3.4	31

51	Formation and micro-Raman spectroscopic study of Aurivillius and fluorite-type $\text{SrBi}_2\text{Nb}_2\text{O}_9$ nanocrystallites obtained using an amorphous citrate route. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 409-415	6	19
50	Synthesis of zirconia/alumina and alumina/zirconia core/shell particles via a heterocoagulation mechanism. <i>Journal of the European Ceramic Society</i> , 2006 , 26, 3133-3138	6	13
49	Synthesis and Dispersion of PZT Ultra-Fine Powders. <i>Materials Science Forum</i> , 2006 , 514-516, 179-183	0.4	
48	Entirely Aqueous Solution/Gel Route for the Preparation of $(\text{Pb}_{1-x}\text{Ca}_x)\text{TiO}_3$ Thin Films. <i>Chemistry of Materials</i> , 2006 , 18, 6448-6456	9.6	9
47	Alternative Gate Dielectric Materials. <i>ECS Transactions</i> , 2006 , 3, 479-497	1	2
46	Additive-free Hydrothermal Synthesis of High Aspect Ratio ZnO Particles from Aqueous Solution. <i>Chemistry Letters</i> , 2006 , 35, 1420-1421	1.7	5
45	Water-based wet chemical synthesis of (doped) ZnO nanostructures. <i>Journal of Sol-Gel Science and Technology</i> , 2006 , 39, 41-47	2.3	35
44	Structure Determination by EXAFS of Nb Peroxo Citrate Complexes in Aqueous Solution/Gel Systems. <i>Physica Scripta</i> , 2005 , 415	2.6	7
43	Effect of crystallization parameters on the properties of $\text{Bi}_3.5\text{La}_0.5\text{Ti}_3\text{O}_{12}$ thin films deposited by aqueous chemical solution deposition. <i>Thin Solid Films</i> , 2005 , 492, 105-113	2.2	9
42	Synthesis of strontium bismuth niobate ($\text{SrBi}_2\text{Nb}_2\text{O}_9$) using an aqueous acetate/citrate precursor gel: thermal decomposition and phase formation. <i>Thermochimica Acta</i> , 2005 , 426, 39-48	2.9	31
41	Effect of pyrolysis temperature on the properties of $\text{Bi}_3.5\text{La}_0.5\text{Ti}_3\text{O}_{12}$ thin films deposited by aqueous chemical solution deposition. <i>Materials Chemistry and Physics</i> , 2005 , 92, 431-437	4.4	8
40	Preparation of $\text{La}_0.5\text{Sr}_0.5\text{CoO}_3$ powders and thin film from a new aqueous solution/gel precursor. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005 , 118, 79-83	3.1	12
39	Gel Structure, Gel Decomposition and Phase Formation Mechanisms in the Aqueous Solution/Gel Route to Lanthanum Substituted Bismuth Titanate. <i>Journal of Sol-Gel Science and Technology</i> , 2005 , 33, 283-298	2.3	19
38	Phase Formation of Perovskite Lead Magnesium Niobate Prepared by an Aqueous Solution-Gel Method. <i>Key Engineering Materials</i> , 2004 , 264-268, 347-350	0.4	5
37	Synthesis of Tetragonal Zirconia Nanoparticles via an Aqueous Solution-Gel Method. <i>Key Engineering Materials</i> , 2004 , 264-268, 343-346	0.4	11
36	Aqueous CSD of Ferroelectric $\text{Bi}_3.5\text{La}_0.5\text{Ti}_3\text{O}_{12}$ (BLT) Thin Films. <i>Integrated Ferroelectrics</i> , 2004 , 62, 205-209	2.9	8
35	Synthesis of RuO_2 and SrRuO_3 powders by means of aqueous solution gel chemistry. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 919-923	6	18
34	Synthesis of $(\text{Bi},\text{La})_4\text{Ti}_3\text{O}_{12}$ by a new aqueous solution-gel route. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 905-909	6	33

33	Phase evolution of sol-gel prepared $\text{Pb}(\text{Zr}_{0.3}\text{Ti}_{0.7})\text{O}_3$ thin films deposited on $\text{IrO}_2/\text{TiO}_2/\text{SiO}_2/\text{Si}$ electrodes. <i>Thin Solid Films</i> , 2004 , 467, 104-111	2.2	13
32	Thermal behaviour of arsenic oxides (As_2O_5 and As_2O_3) and the influence of reducing agents (glucose and activated carbon). <i>Thermochimica Acta</i> , 2004 , 414, 145-153	2.9	34
31	A statistical approach to the identification of determinant factors in the preparation of phase pure $(\text{Bi},\text{La})_4\text{Ti}_3\text{O}_{12}$ from an aqueous citrate gel. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 2575-2581	6	10
30	Influence of Heat Treatment on $\text{Sr}_{0.9}\text{Bi}_{2.2}\text{Ta}_2\text{O}_9$ Thin Films Prepared by Aqueous CSD. <i>Integrated Ferroelectrics</i> , 2004 , 62, 177-182	0.8	6
29	Chemical Solution Deposition of ZnO Thin Films by an Aqueous Solution Gel Precursor Route. <i>Journal of Sol-Gel Science and Technology</i> , 2003 , 26, 523-526	2.3	26
28	The Formation of Ferroelectric Bismuth Titanate ($\text{Bi}_4\text{Ti}_3\text{O}_{12}$) from an Aqueous Metal-Chelate Gel. <i>Journal of Sol-Gel Science and Technology</i> , 2003 , 26, 1103-1107	2.3	26
27	Aqueous Solution-Gel Synthesis of Strontium Bismuth Niobate ($\text{SrBi}_2\text{Nb}_2\text{O}_9$). <i>Journal of Sol-Gel Science and Technology</i> , 2003 , 26, 1125-1129	2.3	33
26	Study of the decomposition of an aqueous metal-chelate gel precursor for $(\text{Bi},\text{La})_4\text{Ti}_3\text{O}_{12}$ by means of TGA-FTIR, TGA-MS and HT-DRIFT. <i>Thermochimica Acta</i> , 2003 , 397, 143-153	2.9	58
25	Arsenic release during pyrolysis of CCA treated wood waste: current state of knowledge. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003 , 68-69, 613-633	6	31
24	Synthesis of ZnO nanopowder via an aqueous acetate-citrate gelation method. <i>Materials Research Bulletin</i> , 2002 , 37, 901-914	5.1	94
23	The use of TGA-MS, TGA-FTIR, HT-XRD and HT-DRIFT for the preparation and characterization of PbTiO_3 and BaTiO_3 . <i>Thermochimica Acta</i> , 2002 , 392-393, 29-35	2.9	17
22	Thermal decomposition of the ammonium zinc acetate citrate precursor for aqueous chemical solution deposition of ZnO . <i>Journal of Materials Science</i> , 2002 , 37, 81-88	4.3	70
21	Ferroelectric $\text{SrBi}_2\text{Nb}_2\text{O}_9$ Thin Films by Aqueous Chemical Solution Deposition. <i>Integrated Ferroelectrics</i> , 2002 , 45, 205-213	0.8	16
20	Aqueous Chemical Solution Deposition of Ferroelectric Thin Films. <i>Integrated Ferroelectrics</i> , 2002 , 45, 113-122	0.8	52
19	Synthesis of $\text{SrBi}_2\text{Ta}_2\text{O}_9$ (SBT) by means of a soluble Ta(V) precursor. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 2047-2049	6	27
18	Structure Determination and Refinement of Acid Strontium Oxalate from X-Ray and Neutron Powder Diffraction. <i>Journal of Solid State Chemistry</i> , 2001 , 157, 283-288	3.3	9
17	Structure determination of anhydrous acid strontium oxalate by conventional X-ray powder diffraction. <i>Powder Diffraction</i> , 2001 , 16, 224-226	1.8	2
16	Phase formation of ferroelectric perovskite $0.75\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3 \cdot 0.25\text{BaTiO}_3$ prepared by aqueous solution-gel chemistry. <i>Journal of Materials Chemistry</i> , 2001 , 11, 1192-1197		46

15	Powder diffraction data of Ba _{0.5} Sr _{0.5} TiO(C ₂ O ₄) ₂ ·5H ₂ O. <i>Powder Diffraction</i> , 2001 , 16, 107-109	1.8	1
14	The use of Hi-Res TGA, TG-FTIR, HT-DRIFT and HT-XRD in the study of the decomposition of La ₂ (C ₂ O ₄) ₃ ·10H ₂ O. <i>Thermochimica Acta</i> , 2000 , 354, 145-151	2.9	25
13	Sol-gel synthesis and properties of YBa ₂ (Cu _{1-x} M _x) ₄ O _y (M=Co, Ni) and effects of additional replacement of yttrium by calcium. <i>Solid State Sciences</i> , 1999 , 1, 259-268		10
12	Thermal treatment of a Y-123 precursor prepared using the hydroxide co-precipitation method. <i>Solid State Sciences</i> , 1999 , 1, 351-355		1
11	Preparation and characterization of coprecipitates and mechanical mixtures of calcium-strontium oxalates using XRD, SEM-EDX and TG. <i>Thermochimica Acta</i> , 1998 , 318, 143-153	2.9	13
10	Enhancement of T _c by substituting strontium for barium in the YBa ₂ Cu ₄ O ₈ superconductor prepared by a sol-gel method. <i>Physica C: Superconductivity and Its Applications</i> , 1998 , 307, 209-220	1.3	10
9	Matrix-Isolation FTIR Studies and Theoretical Calculations of Hydrogen-Bonded Complexes of Molecules Modeling Adenine Tautomers. 1. H-Bonding of Benzimidazoles with H ₂ O in Ar Matrices. <i>Journal of Physical Chemistry A</i> , 1998 , 102, 4863-4877	2.8	34
8	Study of different chemical methods to prepare ceramic high-temperature superconductors. <i>Superconductor Science and Technology</i> , 1998 , 11, 82-87	3.1	15
7	Matrix-Isolation FTIR Studies and Theoretical Calculations of Hydrogen-Bonded Complexes of Imidazole. A Comparison between Experimental Results and Different Calculation Methods. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 2397-2413	2.8	86
6	Thermal treatment of a modified alkoxide gel precursor for the preparation of the YBa ₂ Cu ₄ O ₈ superconductor. <i>Journal of Theoretical Biology</i> , 1997 , 48, 989-996	2.3	7
5	Synthesis of the high temperature superconductor YBa ₂ Cu ₃ O _{7-x} by the hydroxide co-precipitation method. <i>Physica C: Superconductivity and Its Applications</i> , 1997 , 278, 55-61	1.3	16
4	Correlations between ab initio and experimental data for isolated H-bonded complexes of water with nitrogen bases. <i>Journal of Molecular Structure</i> , 1997 , 410-411, 315-322	3.4	1
3	Deep Eutectic Solvents as Nonflammable Electrolytes for Durable Sodium-Ion Batteries. <i>Advanced Energy and Sustainability Research</i> , 2100159	1.6	0
2	Effect of TiO _x Surface Modification on the Electrochemical Performances of Ni-Rich (NMC-622) Cathode Material for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> ,	6.1	3
1	Ultrasonic Spray Coating of Silver Nanowire-Based Electrodes for Organic Light-Emitting Diodes. <i>Advanced Engineering Materials</i> , 2100808	3.5	0