

# Marlies Van Bael

## List of Publications by Year in descending order

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220  
papers

4,448  
citations

109321  
35  
h-index

189892  
50  
g-index

225  
all docs

225  
docs citations

225  
times ranked

5528  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of ZnO nanopowder via an aqueous acetate-citrate gelation method. Materials Research Bulletin, 2002, 37, 901-914.	5.2	111
2	Preparation and benchmarking of thin film supported PTMSP-silica pervaporation membranes. Journal of Membrane Science, 2012, 389, 265-271.	8.2	106
3	Synthesis of ZnO nanorods from aqueous solution. Materials Letters, 2007, 61, 2624-2627.	2.6	102
4	Towards Efficient Hybrid Solar Cells Based on Fully Polymer Infiltrated ZnO Nanorod Arrays. Advanced Materials, 2011, 23, 2802-2805.	21.0	100
5	Eutectogels: A New Class of Solid Composite Electrolytes for Li/Li-Ion Batteries. Chemistry of Materials, 2018, 30, 655-662.	6.7	91
6	Matrix-Isolation FTIR Studies and Theoretical Calculations of Hydrogen-Bonded Complexes of Imidazole. A Comparison between Experimental Results and Different Calculation Methods. Journal of Physical Chemistry A, 1997, 101, 2397-2413.	2.5	90
7	Self-Assembled Multilayers of Vertically Aligned Semiconductor Nanorods on Device-Scale Areas. Advanced Materials, 2011, 23, 2205-2209.	21.0	83
8	Title is missing!. Journal of Materials Science, 2002, 37, 81-88.	3.7	78
9	High flux composite PTMSP-silica nanohybrid membranes for the pervaporation of ethanol/water mixtures. Journal of Membrane Science, 2010, 351, 160-167.	8.2	76
10	Evolution of Metal-Trifluoroacetate Precursors in the Thermal Decomposition toward High-Performance $\text{YBa}_{2-x}\text{Cu}_{3-x}\text{O}_{7-x}$ Superconducting Films. Chemistry of Materials, 2010, 22, 1686-1694.	6.7	74
11	Influence of fullerene photodimerization on the PCBM crystallization in polymer: Fullerene bulk heterojunctions under thermal stress. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1209-1214.	2.1	72
12	Influence of incorporation of ZnO nanoparticles and biaxial orientation on mechanical and oxygen barrier properties of polypropylene films for food packaging applications. Journal of Applied Polymer Science, 2011, 120, 1616-1623.	2.6	67
13	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. Thermochimica Acta, 2003, 397, 143-153.	2.7	65
14	Effects of precursor chemistry and thermal treatment conditions on obtaining phase pure bismuth ferrite from aqueous gel precursors. Journal of the European Ceramic Society, 2009, 29, 3007-3013.	5.7	62
15	Aqueous Chemical Solution Deposition of Ferroelectric Thin Films. Integrated Ferroelectrics, 2002, 45, 113-122.	0.7	60
16	Polymeric Backbone Eutectogels as a New Generation of Hybrid Solid-State Electrolytes. Chemistry of Materials, 2020, 32, 3783-3793.	6.7	52
17	An aqueous solution-gel citratoperoxo-Ti(IV) precursor: synthesis, gelation, thermo-oxidative decomposition and oxide crystallization. Journal of Sol-Gel Science and Technology, 2007, 44, 65-74.	2.4	50
18	Phase formation of ferroelectric perovskite $0.75 \text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.25 \text{BaTiO}_3$ prepared by aqueous solution-gel chemistry. Journal of Materials Chemistry, 2001, 11, 1192-1197.	6.7	49

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19	Solâ€gel (combustion) synthesis and characterization of different alkaline earth metal (Ca, Sr, Ba) stannates. Journal of Sol-Gel Science and Technology, 2012, 64, 643-652.	2.4	47
20	Atomic Layer Deposition of Gd-Doped HfO[sub 2] Thin Films. Journal of the Electrochemical Society, 2010, 157, G105.	2.9	45
21	Influence of Interface Morphology onto the Photovoltaic Properties of Nanopatterned ZnO/Poly(3-hexylthiophene) Hybrid Solar Cells. An Impedance Spectroscopy Study. Journal of Physical Chemistry C, 2011, 115, 16695-16700.	3.1	45
22	Thermal behaviour of arsenic oxides (As <sub>2</sub> O <sub>5</sub> and As <sub>2</sub> O <sub>3</sub> ) and the influence of reducing agents (glucose) Tj ETQq0 0,0 rgBT /Overlock 10	2.7	42
23	Synthesis of thin dense titania films via an aqueous solution-gel method. Journal of Sol-Gel Science and Technology, 2007, 41, 43-48.	2.4	40
24	Arsenic release during pyrolysis of CCA treated wood waste: current state of knowledge. Journal of Analytical and Applied Pyrolysis, 2003, 68-69, 613-633.	5.5	38
25	Structural and Optical Properties of DNA Layers Covalently Attached to Diamond Surfaces. Langmuir, 2008, 24, 7269-7277.	3.5	38
26	Synthesis of (Bi,La) <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> by a new aqueous solution-gel route. Journal of the European Ceramic Society, 2004, 24, 905-909.	5.7	37
27	Hydrothermal synthesis of ZnO nanorods: a statistical determination of the significant parameters in view of reducing the diameter. Nanotechnology, 2009, 20, 055608.	2.6	37
28	Investigation of the ferroelectricâ€relaxor crossover in Ce-doped BaTiO <sub>3</sub> ceramics by impedance spectroscopy and Raman study. Phase Transitions, 2013, 86, 703-714.	1.3	37
29	A novel explanation for the increased conductivity in annealed Al-doped ZnO: an insight into migration of aluminum and displacement of zinc. Physical Chemistry Chemical Physics, 2017, 19, 27866-27877.	2.8	37
30	Matrix-Isolation FTâˆIR Studies and Theoretical Calculations of Hydrogen-Bonded Complexes of Molecules Modeling Adenine Tautomers. 1. H-Bonding of Benzimidazoles with H <sub>2</sub> O in Ar Matrices. Journal of Physical Chemistry A, 1998, 102, 4863-4877.	2.5	36
31	Synthesis of strontium bismuth niobate (SrBi <sub>2</sub> Nb <sub>2</sub> O <sub>9</sub> ) using an aqueous acetateâ€citrate precursor gel: thermal decomposition and phase formation. Thermochimica Acta, 2005, 426, 39-48.	2.7	36
32	Water-based wet chemical synthesis of (doped) ZnO nanostructures. Journal of Sol-Gel Science and Technology, 2006, 39, 41-47.	2.4	36
33	Ti surface doping of LiNi<sub>0.5</sub> Mn<sub>1.5</sub> O<sub>4</sub> positive electrodes for lithium ion batteries. RSC Advances, 2018, 8, 7287-7300.	3.6	36
34	Ground-state charge-transfer complex formation in hybrid poly(3-hexyl thiophene):titanium dioxide solar cells. Applied Physics Letters, 2008, 93, .	3.3	35
35	Study of interfacial reactions and phase stabilization of mixed Sc, Dy, Hf high-k oxides by attenuated total reflectance infrared spectroscopy. Applied Surface Science, 2009, 255, 7812-7817.	6.1	35
36	Dielectric Response of Ta[sub 2]O[sub 5], Nb[sub 2]O[sub 5], and NbTaO[sub 5] from First-Principles Investigations. Journal of the Electrochemical Society, 2010, 157, G20.	2.9	35

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37	Photoluminescence of Pr <sup>3+</sup> -doped calcium and strontium stannates. Journal of Luminescence, 2016, 172, 323-330.	3.1	35
38	Aqueous Solutions for Low-Temperature Photoannealing of Functional Oxide Films: Reaching the 400 Å°C Si-Technology Integration Barrier. Journal of the American Chemical Society, 2011, 133, 12922-12925.	13.7	34
39	Aqueous Solution-Gel Synthesis of Strontium Bismuth Niobate (SrBi <sub>2</sub> Nb <sub>2</sub> O <sub>9</sub> ). Journal of Sol-Gel Science and Technology, 2003, 26, 1125-1129.	2.4	33
40	Relation between synthesis conditions, dopant position and charge carriers in aluminium-doped ZnO nanoparticles. RSC Advances, 2013, 3, 15254.	3.6	33
41	H <sub>2</sub> S exposure of a (100)Ge surface: Evidences for a (2Å <sup>-1</sup> ) electrically passivated surface. Applied Physics Letters, 2007, 90, 222105.	3.3	32
42	Synthesis of platelet-shaped boehmite and $\gamma$ -alumina nanoparticles via an aqueous route. Ceramics International, 2008, 34, 1971-1974.	4.8	32
43	Diamond Nucleation by Carbon Transport from Buried Nanodiamond TiO <sub>2</sub> Sol-Gel Composites. Advanced Materials, 2009, 21, 670-673.	21.0	32
44	A UV-absorber bismuth( <sup>iii</sup> )-N-methyldiethanolamine complex as a low-temperature precursor for bismuth-based oxide thin films. Journal of Materials Chemistry C, 2014, 2, 8750-8760.	5.5	32
45	Hydrothermal synthesis of a concentrated and stable dispersion of TiO <sub>2</sub> nanoparticles. Chemical Engineering Journal, 2013, 223, 135-144.	12.7	31
46	Thermal behaviour of arsenic trioxide adsorbed on activated carbon. Journal of Hazardous Materials, 2009, 166, 1238-1243.	12.4	30
47	Luminescence properties of Sm <sup>3+</sup> -doped alkaline earth ortho-stannates. Optical Materials, 2014, 36, 1146-1152.	3.6	30
48	Chemical Solution Deposition of ZnO Thin Films by an Aqueous Solution Gel Precursor Route. Journal of Sol-Gel Science and Technology, 2003, 26, 523-526.	2.4	29
49	Surface plasma pretreatment for enhanced diamond nucleation on AlN. Applied Physics Letters, 2013, 102, .	3.3	29
50	Factors Influencing the Conductivity of Aqueous Sol(ution)-Gel-Processed Al-Doped ZnO Films. Chemistry of Materials, 2014, 26, 5839-5851.	6.7	29
51	Synthesis of SrBi <sub>2</sub> Ta <sub>2</sub> O <sub>9</sub> (SBT) by means of a soluble Ta(V) precursor. Journal of the European Ceramic Society, 2001, 21, 2047-2049.	5.7	28
52	Study of the decomposition of aqueous citratoperoxo-Ti(IV)-gel precursors for titania by means of TGA-MS and FTIR. Thermochimica Acta, 2007, 456, 38-47.	2.7	28
53	A study on the thermal sintering process of silver nanoparticle inkjet inks to achieve smooth and highly conducting silver layers. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1403-1409.	1.8	28
54	Sunlight-Fueled, Low-Temperature Ru-Catalyzed Conversion of CO <sub>2</sub> and H <sub>2</sub> to CH <sub>4</sub> with a High Photon-to-Methane Efficiency. ACS Omega, 2019, 4, 7369-7377.	3.5	28

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55	The Formation of Ferroelectric Bismuth Titanate (Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> ) from an Aqueous Metal-Chelate Gel. Journal of Sol-Gel Science and Technology, 2003, 26, 1103-1107.	2.4	27
56	The use of Hi-Res TGA, TG-FTIR, HT-DRIFT and HT-XRD in the study of the decomposition of La <sub>2</sub> (C <sub>2</sub> O <sub>4</sub> ) <sub>3</sub> ·10H <sub>2</sub> O. Thermochemica Acta, 2000, 354, 145-151.	2.7	26
57	In Situ Mechanical Analysis of the Nanoscopic Solid Electrolyte Interphase on Anodes of Li-ion Batteries. Advanced Science, 2019, 6, 1900190.	11.2	26
58	Towards high-performance biopackaging: barrier and mechanical properties of dual-action polycaprolactone/zinc oxide nanocomposites. Polymers for Advanced Technologies, 2012, 23, 1422-1428.	3.2	25
59	V <sub>2</sub> O <sub>5</sub> films by control of the oxidation state from aqueous precursor to crystalline phase. Dalton Transactions, 2013, 42, 959-968.	3.3	25
60	ZnO-Based Sunscreen: The Perfect Example To Introduce Nanoparticles in an Undergraduate or High School Chemistry Lab. Journal of Chemical Education, 2014, 91, 259-263.	2.3	25
61	Impact of Process Optimizations on the Electrical Performance of High-k Layers Deposited by Aqueous Chemical Solution Deposition. Journal of the Electrochemical Society, 2008, 155, G91.	2.9	24
62	On the Origin of Diamond Plates Deposited at Low Temperature. Crystal Growth and Design, 2017, 17, 4306-4314.	3.0	24
63	Collective photothermal effect of Al <sub>2</sub> O <sub>3</sub> -supported spheroidal plasmonic Ru nanoparticle catalysts in the sunlight-powered Sabatier reaction. ChemCatChem, 2020, 12, 5618-5622.	3.7	24
64	Gel Structure, Gel Decomposition and Phase Formation Mechanisms in the Aqueous Solution "Gel Route to Lanthanum Substituted Bismuth Titanate. Journal of Sol-Gel Science and Technology, 2005, 33, 283-298.	2.4	23
65	The aqueous solution-gel synthesis of perovskite Pb(Zr <sub>1-x</sub> Ti <sub>x</sub> )O <sub>3</sub> (PZT). Journal of Materials Science, 2007, 42, 624-632.	3.7	23
66	Aqueous solution "gel preparation of ultrathin ZrO <sub>2</sub> films for gate dielectric application. Thin Solid Films, 2008, 516, 8343-8351.	1.8	23
67	Substitutional phosphorus incorporation in nanocrystalline CVD diamond thin films. Physica Status Solidi - Rapid Research Letters, 2014, 8, 705-709.	2.4	22
68	Thermal decomposition and spectroscopic investigation of a new aqueous glycolato(-peroxo) Ti(IV) solution "gel precursor. Thermochemica Acta, 2011, 520, 121-133.	2.7	21
69	Constructive versus Destructive Heterogeneity in Porous Electrodes of Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 11820-11829.	5.1	21
70	Nanodiamond seeding on plasma-treated tantalum thin films and the role of surface contamination. Applied Surface Science, 2021, 538, 148016.	6.1	21
71	Formation and micro-Raman spectroscopic study of Aurivillius and fluorite-type SrBi <sub>2</sub> Nb <sub>2</sub> O <sub>9</sub> nanocrystallites obtained using an "amorphous citrate" route. Journal of the European Ceramic Society, 2006, 26, 409-415.	5.7	20
72	Aqueous chemical solution deposition of ultrathin lanthanide oxide dielectric films. Journal of Materials Research, 2007, 22, 3484-3493.	2.6	20

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73	Atomic Layer Deposition of Gadolinium Aluminate using $Gd(iPr)_3$ , TMA, and $O_3$ or $H_2O$ . Chemical Vapor Deposition, 2010, 16, 170-178.	1.3	20
74	Effect of annealing atmosphere on $LiMn_2O_4$ for thin film Li-ion batteries from aqueous chemical solution deposition. Journal of Materials Chemistry A, 2016, 4, 18457-18469.	10.3	20
75	The use of TGA-MS, TGA-FTIR, HT-XRD and HT-DRIFT for the preparation and characterization of $PbTiO_3$ and $BaTiO_3$ . Thermochemica Acta, 2002, 392-393, 29-35.	2.7	19
76	Preparation of a porous nanocrystalline $TiO_2$ layer by deposition of hydrothermally synthesized nanoparticles. Journal of the European Ceramic Society, 2007, 27, 4529-4535.	5.7	19
77	Fully water-processable metal oxide nanorods/polymer hybrid solar cells. Solar Energy Materials and Solar Cells, 2012, 107, 230-235.	6.2	19
78	Properties and thermal stability of solution processed ultrathin, high-k bismuth titanate ( $Bi_2Ti_2O_7$ ) films. Materials Research Bulletin, 2012, 47, 511-517.	5.2	19
79	Growth, structural and plasma illumination properties of nanocrystalline diamond-decorated graphene nanoflakes. RSC Advances, 2016, 6, 63178-63184.	3.6	19
80	Study of different chemical methods to prepare ceramic high-temperature superconductors. Superconductor Science and Technology, 1998, 11, 82-87.	3.5	18
81	Synthesis of $RuO_2$ and $SrRuO_3$ powders by means of aqueous solution gel chemistry. Journal of the European Ceramic Society, 2004, 24, 919-923.	5.7	18
82	Water based preparation method for "green" solid-state polythiophene solar cells. Thin Solid Films, 2008, 516, 7245-7250.	1.8	18
83	The pressure sensitivity of wrinkled B-doped nanocrystalline diamond membranes. Scientific Reports, 2016, 6, 35667.	3.3	18
84	Vertically aligned diamond-graphite hybrid nanorod arrays with superior field electron emission properties. APL Materials, 2017, 5, .	5.1	18
85	Layered Perovskite-Like $Pb_2Fe_2O_5$ Structure as a Parent Matrix for the Nucleation and Growth of Crystallographic Shear Planes. Inorganic Chemistry, 2011, 50, 4978-4986.	4.0	17
86	$SnO_2$ thin films from an aqueous citrato peroxo Sn(IV) precursor. Journal of Sol-Gel Science and Technology, 2012, 62, 57-64.	2.4	17
87	Aqueous citrato-oxovanadate( $iv$ ) precursor solutions for $VO_2$ : synthesis, spectroscopic investigation and thermal analysis. Dalton Transactions, 2014, 43, 12614-12623.	3.3	17
88	Combustion deposition of $MoO_3$ films: from fundamentals to OPV applications. RSC Advances, 2015, 5, 91349-91362.	3.6	17
89	Enhancement of plasma illumination characteristics of few-layer graphene-diamond nanorods hybrid. Nanotechnology, 2017, 28, 065701.	2.6	17
90	Synthesis of the high temperature superconductor $YBa_2Cu_3O_{7-\delta}$ by the hydroxide co-precipitation method. Physica C: Superconductivity and Its Applications, 1997, 278, 55-61.	1.2	16

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91	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.	2.7	16
92	Ferroelectric SrBi <sub>2</sub> Nb <sub>2</sub> O <sub>9</sub> Thin Films by Aqueous Chemical Solution Deposition. <i>Integrated Ferroelectrics</i> , 2002, 45, 205-213.	0.7	16
93	Aqueous Chemical Solution Deposition. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, G15.	2.2	16
94	Aqueous Chemical Solution Deposition of Ferroelectric Ti <sub>4</sub> +Cosubstituted (Bi,Lu) <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> Thin Films. <i>Chemistry of Materials</i> , 2007, 19, 2994-3001.	6.7	16
95	Comparison of Two Novel Solution-Based Routes for the Synthesis of Equiaxed ZnO Nanoparticles. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-6.	2.7	16
96	Understanding the Importance of Cu(I) Intermediates in Self-Reducing Molecular Inks for Flexible Electronics. <i>Inorganic Chemistry</i> , 2018, 57, 15205-15215.	4.0	16
97	Screen-printing of flexible semi-transparent electrodes and devices based on silver nanowire networks. <i>Nanotechnology</i> , 2018, 29, 425201.	2.6	16
98	Eu <sup>3+</sup> -Doped Ln <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> (Ln = Er, Tm, Yb, Lu) garnets: Synthesis, characterization and investigation of structural and luminescence properties. <i>Journal of Luminescence</i> , 2019, 212, 14-22.	3.1	16
99	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.	5.7	15
100	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.	4.8	15
101	Analytical TEM study of CVD diamond growth on TiO <sub>2</sub> sol-gel layers. <i>Diamond and Related Materials</i> , 2012, 23, 93-99.	3.9	15
102	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.	5.2	15
103	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.	5.7	14
104	Solution derived ZnO:Al films with low resistivity. <i>Thin Solid Films</i> , 2012, 524, 81-85.	1.8	14
105	Relation between Morphology and Recombination Kinetics in Nanostructured Hybrid Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14237-14242.	3.1	14
106	Tuning the Dimensions of ZnO Nanorod Arrays for Application in Hybrid Photovoltaics. <i>ChemPhysChem</i> , 2012, 13, 2777-2783.	2.1	14
107	Transparent conducting oxide films of group V doped titania prepared by aqueous chemical solution deposition. <i>Thin Solid Films</i> , 2014, 555, 33-38.	1.8	14
108	Amorphous and perovskite Li <sub>3</sub> La <sub>(2/3)~x</sub> TiO <sub>3</sub> (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.	2.4	14



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109	Field electron emission enhancement in lithium implanted and annealed nitrogen-incorporated nanocrystalline diamond films. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	14
110	Eu <sup>3+</sup> -Doped Y <sub>3</sub> Sm <sub>x</sub> Al <sub>5</sub> O <sub>12</sub> garnet: synthesis and structural investigation. <i>New Journal of Chemistry</i> , 2018, 42, 2278-2287.	2.8	14
111	The impact of polymeric binder on the morphology and performances of sulfur electrodes in lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2020, 360, 136993.	5.2	14
112	Probing the impact of material properties of core-shell SiO <sub>2</sub> @TiO <sub>2</sub> spheres on the plasma-catalytic CO <sub>2</sub> dissociation using a packed bed DBD plasma reactor. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 46, 101468.	6.8	14
113	Dielectric Barrier Discharge (DBD) Plasma Coating of Sulfur for Mitigation of Capacity Fade in Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 28072-28089.	8.0	14
114	Synthesis of Tetragonal Zirconia Nanoparticles via an Aqueous Solution-Gel Method. <i>Key Engineering Materials</i> , 2004, 264-268, 343-346.	0.4	13
115	Phase evolution of sol-gel prepared Pb(Zr <sub>0.3</sub> Ti <sub>0.7</sub> )O <sub>3</sub> thin films deposited on IrO <sub>2</sub> /TiO <sub>2</sub> /SiO <sub>2</sub> /Si electrodes. <i>Thin Solid Films</i> , 2004, 467, 104-111.	1.8	13
116	Preparation of La <sub>0.5</sub> Sr <sub>0.5</sub> CoO <sub>3</sub> 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.	3.5	13
117	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.	2.4	13
118	Synthesis and mechanical and tribological characterization of alumina-yttria 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.	4.8	13
119	Crosslinked poly[1-(trimethylsilyl)-1-propyne] membranes: Characterization and pervaporation of aqueous tetrahydrofuran mixtures. <i>Journal of Membrane Science</i> , 2012, 389, 459-469.	8.2	13
120	BiFeO <sub>3</sub> thin films via aqueous solution deposition: a study of phase formation and stabilization. <i>Journal of Materials Science</i> , 2015, 50, 4463-4476.	3.7	13
121	Enhanced optoelectronic performances of vertically aligned hexagonal boron nitride nanowalls-nanocrystalline diamond heterostructures. <i>Scientific Reports</i> , 2016, 6, 29444.	3.3	13
122	Combustion synthesis as a low temperature route to Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> based powders for lithium ion battery anodes. <i>RSC Advances</i> , 2017, 7, 18745-18754.	3.6	13
123	Enhancement of T <sub>c</sub> by substituting strontium for barium in the YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> superconductor prepared by a sol-gel method. <i>Physica C: Superconductivity and Its Applications</i> , 1998, 307, 209-220.	1.2	12
124	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.	2.9	12
125	Thermal decomposition synthesis of Al-doped ZnO nanoparticles: an in-depth study. <i>RSC Advances</i> , 2013, 3, 23745.	3.6	12
126	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.	17.4	12



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127	CVD diamond growth from nanodiamond seeds buried under a thin chromium layer. <i>Diamond and Related Materials</i> , 2016, 64, 163-168.	3.9	12
128	Ultrasonically spray coated silver layers from designed precursor inks for flexible electronics. <i>Nanotechnology</i> , 2017, 28, 215202.	2.6	12
129	Nanostructure stabilization by low-temperature dopant pinning in multiferroic BiFeO <sub>3</sub> -based thin films produced by aqueous chemical solution deposition. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4234-4245.	5.5	12
130	A comparative study on the switching kinetics of W/VO <sub>2</sub> powders and VO <sub>2</sub> coatings and their implications for thermochromic glazing. <i>Solar Energy Materials and Solar Cells</i> , 2021, 224, 110977.	6.2	12
131	LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> (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> , 2022, 892, 162175.	5.5	12
132	Deep Eutectic Solvents as Nonflammable Electrolytes for Durable Sodium-ion Batteries. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	5.8	12
133	A statistical approach to the identification of determinant factors in the preparation of phase pure (Bi,Li) <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> from an aqueous citrate gel. <i>Journal of the European Ceramic Society</i> , 2004, 24, 2575-2581.	5.7	11
134	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.	5.7	11
135	Alternative high-k dielectrics for semiconductor applications. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 209-213.	1.3	11
136	Stabilization of ambient sensitive atomic layer deposited lanthanum aluminates by annealing and <i>in situ</i> capping. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	11
137	Elucidation of the Growth Mechanism of Sputtered 2D Hexagonal Boron Nitride Nanowalls. <i>Crystal Growth and Design</i> , 2016, 16, 3699-3708.	3.0	11
138	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.	3.3	11
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