Mariuca Gartner

List of Publications by Year
in descending order

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151 papers	2,054 citations	257101 24 h-index	329751 37 g-index
152 all docs	152 docs citations	152 times ranked	2662 citing authors

#	Article	IF	Citations
1	TiO2(Fe3+) nanostructured thin films with antibacterial properties. Thin Solid Films, 2003, 433, 186-190.	0.8	198
2	Optical characterization and microstructure of BaTiO3 thin films obtained by RF-magnetron sputtering. Applied Surface Science, 2006, 253, 344-348.	3.1	90
3	Deposition and characterisation of bismuth oxide thin films. Journal of the European Ceramic Society, 2005, 25, 2171-2174.	2.8	71
4	Optical and thermal characterization of AlN thin films deposited by pulsed laser deposition. Applied Surface Science, 2002, 186, 507-512.	3.1	58
5	Optical and structural characterization of AlInN layers for optoelectronic applications. Journal of Applied Physics, 2010, 108, .	1.1	57
6	Preparation of BiFeO3 films by wet chemical method and their characterization. Journal of the European Ceramic Society, 2007, 27, 937-940.	2.8	54
7	Spectroscopic characterization of CVD-molybdenum oxide films. Electrochimica Acta, 2001, 46, 2215-2219.	2.6	39
8	Chemical solution deposition and characterization of BiFeO3 thin films. Journal of the European Ceramic Society, 2007, 27, 4417-4420.	2.8	37
9	Effect of polyethylene glycol on porous transparent TiO2 films prepared by solâ€“gel method. Ceramics International, 2014, 40, 2209-2220.	2.3	37
10	Hydroxyapatite films obtained by solâ€“gel and sputtering. Thin Solid Films, 2008, 516, 8112-8116.	0.8	35
11	Nb-doped TiO 2 solâ€“gel films for CO sensing applications. Materials Science in Semiconductor Processing, 2016, 42, 397-404.	1.9	35
12	Optical properties of LPCVD silicon oxynitride. Thin Solid Films, 1999, 337, 82-84.	0.8	34
13	Nanostructured SnO₂â€“ZnO composite gas sensors for selective detection of carbon monoxide. Beilstein Journal of Nanotechnology, 2016, 7, 2045-2056.	1.5	34
14	Morphology, structure and optical properties of solâ€“gel ITO thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 222-226.	1.7	33
15	Investigation on the nitrogen doping of multilayered, porous TiO2 thin films. Thin Solid Films, 2008, 516, 8184-8189.	0.8	32
16	Nitrite electrochemical sensing platform based on tin oxide films. Sensors and Actuators B: Chemical, 2020, 316, 128102.	4.0	32
17	Spectroellipsometric characterization of lanthanide-doped TiO2 films obtained via the sol-gel technique. Thin Solid Films, 1993, 234, 561-565.	0.8	30
18	Investigation on preparation and physical properties of nanocrystalline Si/SiO2 superlattices for Si-based light-emitting devices. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 461-466.	1.3	30

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19	The effect of thermal treatment on antibacterial properties of nanostructured TiO2(N) films illuminated with visible light. World Journal of Microbiology and Biotechnology, 2009, 25, 27-31.	1.7	29
20	Characterization of carbon nitride thin films deposited by a combined RF and DC plasma beam. Thin Solid Films, 1998, 325, 123-129.	0.8	28
21	Atomic force microscopy study of TiO2 solâ€“gel films thermally treated under NH3 atmosphere. Thin Solid Films, 2009, 517, 6243-6247.	0.8	28
22	Solâ€“gel versus sputtering indium tin oxide films as transparent conducting oxide materials. Journal of Materials Science: Materials in Electronics, 2016, 27, 4913-4922.	1.1	27
23	Band gap bowing of binary alloys: Experimental results compared to theoretical tight-binding supercell calculations for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Cd</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> Physical Review B, 2010, 82, .	1.1	26
24	Properties of Inâ€“N codoped p-type ZnO nanorods grown through a two-step chemical route. Applied Surface Science, 2015, 344, 196-204.	3.1	25
25	Spectroellipsometric Characterization of Multilayer Sol-Gel Fe2O3 Films. Journal of Sol-Gel Science and Technology, 2003, 26, 745-748.	1.1	24
26	Correlation between the method of preparation and the properties of the solâ€“gel HfO2 thin films. Journal of Non-Crystalline Solids, 2008, 354, 409-415.	1.5	24
27	Experiments for inorganicâ€“organic hybrid solâ€“gel films for micro- and nano-photonics. Materials Science and Engineering C, 2003, 23, 301-306.	3.8	23
28	Structure and properties of the V-doped TiO2 thin films obtained by solâ€“gel and microwave-assisted solâ€“gel method. Journal of Sol-Gel Science and Technology, 2016, 78, 589-599.	1.1	23
29	High-quality PMMA/ZnO NWs piezoelectric coating on rigid and flexible metallic substrates. Applied Surface Science, 2020, 529, 147135.	3.1	23
30	Spectroellipsometric study of the solâ€“gel nanocrystalline ITO multilayer films. Thin Solid Films, 2004, 455-456, 509-512.	0.8	22
31	SiO2 nanospheres and tubes obtained by solâ€“gel method. Journal of Non-Crystalline Solids, 2010, 356, 2634-2640.	1.5	21
32	Miniaturised MOX based sensors for pollutant and explosive gases detection. Sensors and Actuators B: Chemical, 2017, 249, 647-655.	4.0	21
33	Optical properties of silicon thin films related to LPCVD growth condition. Thin Solid Films, 2004, 450, 105-110.	0.8	20
34	Spectroellipsometric characterization of solâ€“gel TiO2â€“CuO thin coatings. Thin Solid Films, 2004, 455-456, 417-421.	0.8	19
35	TiO2-based vitreous coatings obtained by sol-gel method. Journal of Non-Crystalline Solids, 1993, 160, 162-166.	1.5	18
36	Pulsed laser deposition of lithium niobate: a parametric study. Applied Surface Science, 1999, 138-139, 617-621.	3.1	18

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37	Microstructural and optical properties of as-deposited LPCVD silicon films. Thin Solid Films, 2001, 383, 254-257.	0.8	18
38	Investigation on optical and microstructural properties of photoluminescent LPCVD SiOxNy thin films. Optical Materials, 2001, 17, 145-148.	1.7	18
39	Structural and optical properties of the SiO2â€“P2O5 films obtained by solâ€“gel method. Thin Solid Films, 2007, 515, 6601-6605.	0.8	18
40	Surface modification and chemical sensitivity of sol gel deposited nanocrystalline ZnO films. Materials Chemistry and Physics, 2018, 209, 165-171.	2.0	18
41	ZnO based transparent conductive oxide films with controlled type of conduction. Thin Solid Films, 2014, 571, 727-734.	0.8	17
42	Loss of phosphorous in silica-phosphate sol-gel films. Journal of Sol-Gel Science and Technology, 2006, 40, 325-333.	1.1	16
43	Stabilization of the anatase phase in TiO2(Fe3+, PEG) nanostructured coatings. Applied Surface Science, 2006, 253, 367-371.	3.1	15
44	SiO x -P2O5 filmsâ€”promising components in photonic structure. Optical and Quantum Electronics, 2007, 39, 511-521.	1.5	15
45	Structural and electrical properties of Nb doped TiO2 films prepared by the solâ€“gel layer-by-layer technique. Materials Research Bulletin, 2016, 74, 15-20.	2.7	15
46	Optical, microstructural and vibrational properties of solâ€“gel ITO films. Optical Materials, 2021, 114, 110999.	1.7	15
47	Crystallization of a-Si:H films by rapid thermal annealing. Journal of Non-Crystalline Solids, 1998, 227-230, 954-957.	1.5	14
48	Influence of thermal treatment in N2 atmosphere on chemical, microstructural and optical properties of indium tin oxide and nitrogen doped indium tin oxide rf-sputtered thin films. Thin Solid Films, 2013, 541, 121-126.	0.8	14
49	Multi-stage pulsed laser deposition of aluminum nitride at different temperatures. Applied Surface Science, 2016, 374, 143-150.	3.1	14
50	Tubular and Spherical SiO2 Obtained by Sol Gel Method for Lipase Immobilization and Enzymatic Activity. Molecules, 2018, 23, 1362.	1.7	14
51	Investigation on optical properties of CVD films used in MOEMS applications. Journal of Molecular Structure, 2001, 565-566, 519-523.	1.8	13
52	Structure, morphology and optical properties of multilayered solâ€“gel BaTi0.85Zr0.15O3 thin films. Applied Surface Science, 2013, 265, 510-518.	3.1	13
53	Effect of nitrogen incorporation on the structural, optical and dielectric properties of reactive sputter grown ITO films. Applied Surface Science, 2014, 313, 311-319.	3.1	13
54	Tinâ€“Zinc oxide composite ceramics for selective CO sensing. Ceramics International, 2016, 42, 16677-16684.	2.3	13

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55	Influence of laser pulse frequency on the microstructure of aluminum nitride thin films synthesized by pulsed laser deposition. Applied Surface Science, 2017, 394, 197-204.	3.1	13
56	Spectro-ellipsometric investigations of polycrystalline silicon surface roughness. Microelectronic Engineering, 1996, 31, 309-316.	1.1	12
57	TiO2-based porous materials obtained from gels, in different experimental conditions. Journal of Sol-Gel Science and Technology, 1997, 8, 249-253.	1.1	12
58	High-reflectivity II-VI-based distributed Bragg reflectors for the blue-violet spectral range. Applied Physics Letters, 2011, 99, 151101.	1.5	12
59	Coloured TiO2 based glazing obtained by spray pyrolysis for solar thermal applications. Ceramics International, 2014, 40, 3903-3911.	2.3	12
60	Influence of compositional variation on the optical and morphological properties of Ge Sb Se films for optoelectronics application. Infrared Physics and Technology, 2018, 93, 260-270.	1.3	12
61	TiO2â€“SiO2 solâ€“gel hybrid films and their sensitivity to gaseous toluene. Journal of Non-Crystalline Solids, 2008, 354, 693-699.	1.5	11
62	IR studies of impurities in chalcogenide glasses and thin films of the Ge-Sb-S-Te system. Journal of Physics: Conference Series, 2012, 356, 012047.	0.3	11
63	Influence of the substrate and nitrogen amount on the microstructural and optical properties of thin r.f.-sputtered ZnO films treated by rapid thermal annealing. Applied Surface Science, 2012, 261, 815-823.	3.1	11
64	CO sensing properties of SnO2â€“CeO2 mixed oxides. Reaction Kinetics, Mechanisms and Catalysis, 2016, 117, 551-563.	0.8	11
65	Optical and Piezoelectric Properties of Mn-Doped ZnO Films Deposited by Sol-Gel and Hydrothermal Methods. Journal of Nanomaterials, 2019, 2019, 1-12.	1.5	11
66	Optical and microstructural properties of TiO2(Ni2+) thin films. Ceramics International, 1996, 22, 95-99.	2.3	10
67	Structural analysis of silicon dioxide and silicon oxynitride films produced using an oxygen plasma. IEEE Transactions on Plasma Science, 1998, 26, 1700-1712.	0.6	10
68	Influence of the substrate type on the microstructural, optical and electrical properties of solâ€“gel ITO films. Journal of Sol-Gel Science and Technology, 2014, 71, 303-312.	1.1	10
69	VIS/IR spectroscopy of thin AlN films grown by pulsed laser deposition at 400Â°C and 800Â°C and various N₂ pressures. Journal of Physics: Conference Series, 2014, 514, 012001.	0.3	10
70	Niobium/Vanadium doped TiO2 multilayered sol-gel films: Structure, surface chemistry and optical properties. Ceramics International, 2016, 42, 13805-13811.	2.3	10
71	Spectroellipsometric Investigation of LPCVD Polysilicon: As Deposited and After Hydrogenation. Journal De Physique III, 1996, 6, 225-235.	0.3	10
72	Optical and electrical properties of LPCVD silicon oxynitride films on silicon. Vacuum, 2001, 61, 205-209.	1.6	9

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73	Sol?Gel SiO2-ZrO2 Coatings for Optical Applications. Journal of Sol-Gel Science and Technology, 2004, 32, 167-172.	1.1	9
74	Photothermal and photocatalytic processes on TiO2 based materials prepared by sol-gel method. Journal of Sol-Gel Science and Technology, 2006, 37, 175-178.	1.1	9
75	Depth profiling Raman spectroscopy of a thin YBa2Cu3O7â˜Î´ film. Thin Solid Films, 2008, 516, 8190-8194.	0.8	9
76	Substrate impact on optical and microstructural properties of TiO2â€“PEG solâ€“gel films. Ceramics International, 2014, 40, 11803-11811.	2.3	9
77	Investigation of the Atomic Structure of Ge-Sb-Se Chalcogenide Glasses. Advances in Condensed Matter Physics, 2018, 2018, 1-11.	0.4	9
78	Sol-gel Zn, Fe modified SnO2 powders for CO sensors and magnetic applications. Chemical Engineering Research and Design, 2018, 117, 722-729.	2.7	9
79	Doped Sol-gel TiO₂Films for Biological Applications. Bulletin of the Korean Chemical Society, 2008, 29, 1038-1042.	1.0	9
80	Investigation on preparation and physical properties of LPCVD SixOyNz thin films and nanocrystalline Si/SixOyNz superlattices for Si-based light emitting devices. Materials Science and Engineering C, 2002, 19, 225-228.	3.8	8
81	Hybrid Inorganic-Organic Sol?Gel Coatings in the SiO2-TiO2 System. Journal of Sol-Gel Science and Technology, 2004, 32, 173-177.	1.1	8
82	Optical characterization of InxGa1â˜'xN alloys. Applied Surface Science, 2006, 253, 254-257.	3.1	8
83	Optical, morphological and durability studies of quaternary chalcogenide Ge-Sb(As)-(S,Te) films. Materials Research Bulletin, 2018, 106, 234-242.	2.7	8
84	The ellipsometry versatility in the study of sol-gel films. Journal of Sol-Gel Science and Technology, 2021, 98, 1-23.	1.1	8
85	Microstructural information from optical properties of LPCVD silicon films annealed at low temperature. Sensors and Actuators A: Physical, 2002, 99, 160-164.	2.0	7
86	In situ observation of Zn-induced etching during CdSe quantum dot formation using time-resolved ellipsometry. Applied Physics Letters, 2007, 90, 221102.	1.5	7
87	Sensing Layer for Ni Detection in Water Created by Immobilization of Bioengineered Flagellar Nanotubes on Gold Surfaces. ACS Biomaterials Science and Engineering, 2020, 6, 3811-3820.	2.6	7
88	Determination of the Fermi level position in dilute magnetic Ga1-xMnxN films. Journal of Applied Physics, 2014, 115, 123706.	1.1	6
89	Investigation of the Effects of Rapid Thermal Annealing on the Electron Transport Mechanism in Nitrogen-Doped ZnO Thin Films Grown by RF Magnetron Sputtering. Nanomaterials, 2022, 12, 19.	1.9	6
90	Capacity coupled r.f. discharge plasma jet treatment of a-SiC:H structures. Thin Solid Films, 1997, 296, 23-27.	0.8	5

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91	Physical-optical properties of LPCVD amorphous silicon rich-nitride and oxynitride. , 0, , .		5
92	Spectroscopic and X-ray diffraction study of high Tc epitaxial YBCO thin films obtained by pulsed laser deposition. Applied Surface Science, 2006, 253, 400-404.	3.1	5
93	Infrared ellipsometry as an investigation tool of thin layers grown into plasma immersion N+ implanted silicon. Applied Surface Science, 2012, 258, 7195-7201.	3.1	5
94	Structural, textural, surface chemistry and sensing properties of mesoporous Pr, Zn modified SnO 2 â€“TiO 2 powder composites. Ceramics International, 2016, 42, 14992-14998.	2.3	5
95	Preparation and characterization of SiO2î—¸Sb2O3 films obtained by a sol-gel method. Journal of Non-Crystalline Solids, 1992, 151, 109-114.	1.5	4
96	Optical characterization of dielectric borophosphosilicate glass. Microelectronics Reliability, 2000, 40, 617-620.	0.9	4
97	Optical and Structural Properties of SnO2-Based Sol-Gel Thin Films. , 2006, , .		4
98	Optical investigations of tin and zinc oxides as TCOs films. , 2012, , .		4
99	Synthesis method and substrate influence on TiO 2 films doped with low vanadium content. Materials Science in Semiconductor Processing, 2017, 68, 118-127.	1.9	4
100	Inter-trap tunneling in vanadium doped TiO2 sol-gel films. Materials Research Bulletin, 2020, 127, 110854.	2.7	4
101	Structural and morphological changes in low temperature annealed LPCVD Si layers. European Physical Journal Special Topics, 2001, 11, Pr3-315-Pr3-323.	0.2	4
102	SiO2-Sm2O3 vitreous films via the sol-gel method. Journal of Materials Science, 1993, 28, 4435-4441.	1.7	3
103	Spectroellipsometric investigation of optical properties of SiO2 grown by wet thermal oxidation. Surface Science, 2001, 482-485, 448-452.	0.8	3
104	Deposition and characterization of BiFeO3 thin films on different substrates. Journal of Materials Science: Materials in Electronics, 2007, 18, 187-190.	1.1	3
105	Surface topography and optical properties of Ge-Sb(As)-S-Te thin films by atomic-force microscopy and variable angle spectroscopic ellipsometry. Journal of Physics: Conference Series, 2012, 356, 012019.	0.3	3
106	High atomic diffusivity during pulsed laser irradiation of TiON quasi-amorphous films. Applied Surface Science, 2016, 374, 248-251.	3.1	3
107	Simulation Studies for Random Sequential Adsorption in Narrow Slit: Two-Dimensional Parking Model. Bulletin of the Korean Chemical Society, 2008, 29, 873-875.	1.0	3
108	Implanted damage evolution in sequential annealed silicon. Nuclear Instruments & Methods in Physics Research B, 1994, 85, 933-935.	0.6	2

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109	SiO<inf>2</inf>-TiO<inf>2</inf> Undoped or (Er³⁺) Doped Thin Layers for Integrate Optics Prepared by Sol-Gel Method. Semiconductor Conference, 2009 CAS 2009 International, 2007, , .	0.0	2
110	Surface topographic study of chalcogenide thin films of GexSb(As)40â^'xS50Te10 glasses. Micron, 2014, 59, 1-7.	1.1	2
111	TEM and AFM studies of aluminium nitride films synthesized by pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	2
112	Fermi Level Pinning at n-GaAs(110) Electrodes. , 2006, , 257-262.		2
113	Surface and interface phenomena in titanium dioxide films studied by spectroellipsometry. , 1995, , .		1
114	Effect of composition on refractive index dispersion in Ge-Sb-S thin films. , 0, , .		1
115	High-optical-quality LiNbO 3 thin films obtained by pulsed laser deposition. , 1998, , .		1
116	Study of the conductivity in MIS structures with sol-gel TiO/sub 2/ dielectric films. , 0, , .		1
117	Sol-gel preparation of thin films for integrated optics. , 0, , .		1
118	Synthesis and optical properties of Ni doped SnO₂films. Proceedings of SPIE, 2012, , .	0.8	1
119	Annealing of Si surface region modified by plasma immersion implantation of nitrogen. Journal of Physics: Conference Series, 2012, 356, 012031.	0.3	1
120	XPS study of nanoscale SiO_xN_ylayers synthezised by plasma immersion implantation of nitrogen. Journal of Physics: Conference Series, 2014, 514, 012035.	0.3	1
121	Optical characterization of composite layers prepared by plasma polymerization. Journal of Physics: Conference Series, 2016, 682, 012025.	0.3	1
122	New system for nitrites and nitrates detection from natural water sources. , 2018, , .		1
123	Optical Properties of Oxidized, Hydrogenated, and Native Zirconium Surfaces for Wavelengths from 0.3 to 25â€‰Âµm â^' A Study by Ex Situ and In Situ Spectroscopic Ellipsometry. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800676.	0.8	1
124	The Simulation in the Real Conditions of Antibacterial Activity of TiO2 (Fe) Films with Optimized Morphology. Ceramic Engineering and Science Proceedings, 0, , 67-76.	0.1	1
125	Microstructure-optical properties correlation in PZT films. , 0, , .		0
126	PbTiO/sub 3/ films via sol-gel. , 0, , .		0

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127	Transmission electron microscopy and spectroellipsometric investigation of LPCVD polysilicon as-deposited and after hydrogenation. , 0, , .		0
128	A quantitative analysis of the penetration of SnO/sub 2/ into porous silicon. , 0, , .		0
129	Laser and nitrogen plasma beam induced modifications in amorphous silicon thin films. Applied Surface Science, 1997, 109-110, 87-92.	3.1	0
130	Spectroellipsometric characterization of multilayer systems containing Ni and Bi. , 1998, , .		0
131	III-V compounds and piezoelectric ceramic thin films deposited by reactive PLD: application to sensor building. , 1998, , .		0
132	Sol-gel TiO/sub 2/(La) films as gate dielectric in MOS structures. , 0, , .		0
133	Some results concerning the performance of quarter-wave Fresnel Birhomb. , 1998, 3573, 307.		0
134	Dielectric properties of sol-gel TiO 2 (La) films. , 1998, , .		0
135	Ellipsometric studies of indium tin oxide films deposited by sol-gel process. , 0, , .		0
136	Optical characterization of ion implantation in Si and Si/SiO2 structures: spectroellipsometric (SE) and second harmonic generation (SHG) results. Microelectronics Reliability, 1999, 39, 291-295.	0.9	0
137	Preparation and optical characterisation of APCVD BPSG thin films used for micromachining applications. , 0, , .		0
138	Internal structure of the nanosized sol-gel ITO thin films. , 0, , .		0
139	Microstructural and optical properties of LPCVD polysilicon films. , 0, , .		0
140	Microphysical investigation of low temperature annealed LPCVD polysilicon thin films. , 0, , .		0
141	Experiments for waveguide fabrication based on sol-gel process. , 0, , .		0
142	Optical and Microstructural Properties of Sol-Gel TiO<inf>x</inf>N<inf>y</inf> Thin Films. Semiconductor Conference, 2009 CAS 2009 International, 2007, , .	0.0	0
143	The influence of deep levels on the admittance of MIS structures with sol-gel TiO<inf>2</inf> insulator film. , 2008, , .		0
144	Hybrid sol-gel silica films with (TiO2-CeO2) binary nanopowders. Journal of Physics: Conference Series, 2012, 356, 012018.	0.3	0

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145	Surface morphology of RF plasma immersion H⁺ ion implanted and oxidized Si(100) surface. Journal of Physics: Conference Series, 2014, 514, 012036.	0.3	0
146	Electrical characterization of In-N codoped p-type ZnO films grown by chemical methods. Journal of Physics: Conference Series, 2014, 558, 012038.	0.3	0
147	Electrochemical Sensors for Detection of Different Ionic Species (Nitrites/Nitrates and Heavy Metals) in Natural Water Sources. , 2018, , .		0
148	Piezoelectric 1-D nanostructures for the energy harvesting applications. , 2019, , .		0
149	Study of silicon surface layers modified by hydrogen plasma immersion ion implantation and oxidation. Journal of Physics: Conference Series, 2020, 1492, 012056.	0.3	0
150	Optical Properties of Sputtering and Glow Discharge a-C:H Films. , 1995, , 285-290.		0
151	Methods for the Integration of New Architectural Nanostructures with MEMS Systems for Sensors and Harvester Devices. ECS Meeting Abstracts, 2020, MA2020-01, 2279-2279.	0.0	0