

# Edi Gilioli

## List of Publications by Year in descending order

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119  
papers

1,967  
citations

279798  
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302126  
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122  
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122  
docs citations

122  
times ranked

2279  
citing authors

#	ARTICLE	IF	CITATIONS
1	Annealing Effect on One Step Electrodeposited CuSbSe <sub>2</sub> Thin Films. <i>Coatings</i> , 2022, 12, 75.	2.6	9
2	First detection of low field microwave absorption in the disordered multiferroic double perovskite BiFe0.5Mn0.5O <sub>3</sub> . <i>Materials Research Express</i> , 2021, 8, 066101.	1.6	1
3	Laser scribing of Sb <sub>2</sub> Se <sub>3</sub> thin-film solar cells. , 2021, , .		0
4	Growth and structural characterization of Sb <sub>2</sub> Se <sub>3</sub> solar cells with vertical Sb <sub>4</sub> Se <sub>6</sub> ribbon alignment by RF magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 385502.	2.8	11
5	Pressure-induced structural phase transition and suppression of Jahn-Teller distortion in the quadruple perovskite structure. <i>Physical Review Materials</i> , 2021, 5, .	2.4	2
6	Extremely Overdoped Superconducting Cuprates via High Pressure Oxygenation Methods. <i>Condensed Matter</i> , 2021, 6, 50.	1.8	6
7	Direct observation of Jahn-Teller critical dynamics at a charge-order Verwey transition. <i>Physical Review B</i> , 2021, 104, .	3.2	0
8	Role of the substrates in the ribbon orientation of Sb <sub>2</sub> Se <sub>3</sub> films grown by Low-Temperature Pulsed Electron Deposition. <i>Solar Energy Materials and Solar Cells</i> , 2020, 218, 110724.	6.2	50
9	Metastable (CuAu-type) CuInS <sub>2</sub> Phase: High-Pressure Synthesis and Structure Determination. <i>Inorganic Chemistry</i> , 2020, 59, 11670-11675.	4.0	9
10	Synthesis and Characterization of New Superconductors Materials. <i>Crystals</i> , 2020, 10, 649.	2.2	0
11	Unconventional magnetic ferroelectricity in the quadruple perovskite NaMn <sub>7</sub> O <sub>12</sub> . <i>Physical Review B</i> , 2020, 102, .	3.2	4
12	Phase Transitions in the Metastable Perovskite Multiferroics BiCrO <sub>3</sub> and BiCr <sub>0.9</sub> Sc <sub>0.1</sub> O <sub>3</sub> : A Comparative Study. <i>Inorganic Chemistry</i> , 2020, 59, 8727-8735.	4.0	5
13	The Role of Chemical Substitutions on Bi-2212 Superconductors. <i>Crystals</i> , 2020, 10, 462.	2.2	12
14	Local lattice distortions and dynamics in extremely overdoped superconducting YSr <sub>2</sub> Cu <sub>2.75</sub> Mo <sub>0.25</sub> O <sub>7.54</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4559-4564.	7.1	12
15	An affordable method to produce CuInS <sub>2</sub> mechano-targets™ for film deposition. <i>Semiconductor Science and Technology</i> , 2020, 35, 045026.	2.0	8
16	Nonadiabatic coupling of the dynamical structure to the superconductivity in YSr <sub>2</sub> Cu <sub>2.75</sub> Mo <sub>0.25</sub> O <sub>7.54</sub> and Sr <sub>2</sub> CuO <sub>3.3</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 33099-33106.	7.1	9
17	Ultrashort pulse laser scribing of CIGS-based thin film solar cells. , 2020, , .		2
18	Centrosymmetry Breaking and Ferroelectricity Driven by Short-Range Magnetic Order in the Quadruple Perovskite (YMn <sub>3</sub> Mn <sub>4</sub> O <sub>12</sub> ). <i>Inorganic Chemistry</i> , 2019, 58, 14204-14211.	4.0	9

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19	Ferroelectricity in the $1 \text{ m}^2/\text{C}$ range induced by canted antiferromagnetism in $(\text{LaMn}_3)\text{Mn}_4\text{O}_12$ . <i>Applied Physics Letters</i> , 2019, 115, 152902.	3.3	12
20	CIGS-Based Flexible Solar Cells. , 2019, , 365-382.		2
21	$\text{CuSbSe}_2$ Thin Films Deposited from Aqueous Solution by Electrodeposition in One Step. , 2019, , .		1
22	$\text{Al}_{2-\delta}\text{O}_3$ Coating as Passivation Layer for CZT-based Detectors. , 2018, , .		2
23	A comprehensive study of the magnetic properties of the pyroxenes series $\text{CaMgSi}_{2-\delta}\text{O}_{6+\epsilon}$ as a function of Co content. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 285801.	1.8	3
24	$\text{CuSbSe}_2$ thin film solar cells with ~4% conversion efficiency grown by low-temperature pulsed electron deposition. <i>Solar Energy Materials and Solar Cells</i> , 2018, 185, 86-96.	6.2	48
25	High Pressure Induced Insulator-to-Semimetal Transition through Intersite Charge Transfer in $\text{NaMn}_7\text{O}_12$ . <i>Crystals</i> , 2018, 8, 81.	2.2	3
26	Evolution of Magneto-Orbital order Upon $\text{B}_{-\delta}$ -Site Electron Doping in $\text{Na}_{1-\delta}\text{Mn}_{2-\delta}\text{O}_{6+\epsilon}$ . <i>Physical Review Letters</i> , 2018, 120, 257202.	7.8	10
27	Low temperature deposition of bifacial CIGS solar cells on Al-doped Zinc Oxide back contacts. <i>Applied Surface Science</i> , 2017, 412, 52-57.	6.1	36
28	Synthesis and crystal structure of $\text{Ca}(\text{Co,Mg})\text{Si}_{2-\delta}\text{O}_{6+\epsilon}$ pyroxenes: effect of the cation substitution on cell volume. <i>Mineralogical Magazine</i> , 2017, 81, 1129-1139.	1.4	5
29	Bifacial CIGS solar cells grown by Low Temperature Pulsed Electron Deposition. <i>Solar Energy Materials and Solar Cells</i> , 2017, 166, 247-253.	6.2	45
30	Effect of chemical pressure induced by $\text{La}^{3+}/\text{Y}^{3+}$ substitution on the magnetic ordering of $(\text{AMn}_3)\text{Mn}_4\text{O}_12$ quadruple perovskites. <i>Physical Review Materials</i> , 2017, 1, .	2.4	10
31	Progress on Low-Temperature Pulsed Electron Deposition of $\text{CuInGaSe}_2$ Solar Cells. <i>Energies</i> , 2016, 9, 207.	3.1	21
32	Poling-Written Ferroelectricity in Bulk Multiferroic Double-Perovskite $\text{BiFe}_{0.5}\text{Mn}_{0.5}\text{O}_3$ . <i>Inorganic Chemistry</i> , 2016, 55, 6308-6314.	4.0	18
33	Structural and magnetic characterization of the double perovskite $\text{Pb}_{2-\delta}\text{FeMoO}_{6+\epsilon}$ . <i>Journal of Materials Chemistry C</i> , 2016, 4, 1533-1542.	5.5	11
34	New insights on the specific heat of glasses. <i>Philosophical Magazine</i> , 2016, 96, 754-760.	1.6	8
35	Thermoelectric behavior of Ruddlesden-Popper series iridates. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 065601.	1.8	14
36	Optical study of the vibrational and dielectric properties of $\text{BiMnO}_3$ . <i>Physical Review B</i> , 2015, 92, .		

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37	Joule heating-assisted growth of Cu(In,Ga)Se <sub>2</sub> solar cells. Journal of Renewable and Sustainable Energy, 2015, 7, 013112.	2.0	5
38	Field effects on spontaneous magnetization reversal of bulk BiFe <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>3</sub> , an effective strategy for the study of magnetic disordered systems. Journal of Physics Condensed Matter, 2015, 27, 286002.	1.8	5
39	Origin of excess low-energy vibrations in densified B <sub>2</sub> O <sub>3</sub> glasses. Philosophical Magazine, 2015, 95, 2596-2606.	1.6	9
40	Ca-Zn solid solutions in C <sub>2</sub> /cpxyroxenes: Synthesis, crystal structure, and implications for Zn geochemistry. American Mineralogist, 2015, 100, 2209-2218.	1.9	11
41	Comparative study about Al-doped zinc oxide thin films deposited by Pulsed Electron Deposition and Radio Frequency Magnetron Sputtering as Transparent Conductive Oxide for Cu(In,Ga)Se <sub>2</sub> -based solar cells. Thin Solid Films, 2015, 582, 317-322.	1.8	13
42	Low-temperature growth of single-crystal Cu(In,Ga)Se <sub>2</sub> films by pulsed electron deposition technique. Solar Energy Materials and Solar Cells, 2015, 133, 82-86.	6.2	23
43	Commensurate structural modulation in the charge- and orbitally ordered phase of the quadrupole perovskite $\text{Mn}_{3.2} \text{O}_{12}$ . Physical Review B, 2014, 90, 075108.	3.2	18
44	High pressure and multiferroic materials: a happy marriage. IUCrJ, 2014, 1, 590-603.	2.2	43
45	Role of Disorder in the Thermodynamics and Atomic Dynamics of Glasses. Physical Review Letters, 2014, 112, 025502.	7.8	125
46	Structural Evolution under Pressure of BiMnO <sub>3</sub> . Inorganic Chemistry, 2014, 53, 8749-8754.	4.0	14
47	Possible phase separation and weak localization in the absence of a charge-density wave in single-phase $\text{Mn}_{2.2} \text{O}_{2.2}$ . Physical Review B, 2014, 89, 024111.	3.2	28
48	Structural Evolution and Medium Range Order in Permanently Densified Vitreous $\text{SiO}_{2}$ . Physical Review Letters, 2014, 112, 045501.	7.8	34
49	Structural transformations, elastic moduli and thermal expansion of permanently compacted B <sub>2</sub> O <sub>3</sub> glasses. Journal of Non-Crystalline Solids, 2014, 401, 40-43.	3.1	6
50	Growth of Cu(In,Ga)Se <sub>2</sub> thin films by a novel <i>single-stage</i> route based on pulsed electron deposition. Progress in Photovoltaics: Research and Applications, 2013, 21, 588-594.	8.1	9
51	Influence of Packing on Low Energy Vibrations of Densified Glasses. Physical Review Letters, 2013, 111, 245502.	3.2	24
52	Emergence of Crystal-like Atomic Dynamics in Glasses at the Nanometer Scale. Physical Review Letters, 2013, 110, 185503.	7.8	47
53	Magnetolectric coupling driven by inverse magnetostriction in multiferroic BiMn <sub>3</sub> Mn <sub>4</sub> O <sub>12</sub> . Journal of Applied Physics, 2013, 113, .	2.5	15

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55	Dynamics of evaporation from CuGaSe <sub>2</sub> targets in pulsed electron deposition technique. Journal Physics D: Applied Physics, 2013, 46, 245101.	2.8	14
56	Dielectric versus Magnetic Pairing Mechanisms in High-Temperature Cuprate Superconductors Investigated Using Raman Scattering. Physical Review Letters, 2013, 111, 237001.	7.8	30
57	Elastic and anelastic properties of densified vitreous B <sub>2</sub> O <sub>3</sub> : Relaxations and anharmonicity. Physical Review B, 2012, 85, .	3.2	11
58	Solution-free and catalyst-free synthesis of ZnO-based nanostructured TCOs by PED and vapor phase growth techniques. Nanotechnology, 2012, 23, 194008.	2.6	20
59	Using High Pressure to Prepare Polymorphs of the Ba <sub>2</sub> Co <sub>1-x</sub> Zn <sub>x</sub> S <sub>3</sub> (0 < x < 1.0) Compounds. Inorganic Chemistry, 2012, 51, 397-404.	4.0	8
60	15% efficient Cu(In,Ga)Se <sub>2</sub> solar cells obtained by low-temperature pulsed electron deposition. Applied Physics Letters, 2012, 101, .	3.3	49
61	Polymorphism and Multiferroicity in Bi <sub>1-x</sub> (Mn <sub>II</sub> I <sub>3</sub> )(Mn <sub>II</sub> I <sub>4</sub> -xMnIV <sub>x</sub> )O <sub>12</sub> . Chemistry of Materials, 2011, 23, 3628-3635.	6.7	15
62	Effects of permanent densification on the vibrational density of states of vitreous silica. Journal of Non-Crystalline Solids, 2011, 357, 1892-1894.	3.1	4
63	Low temperature pulsed electron deposition and characterization of ZnS films for application in solar cells. Crystal Research and Technology, 2011, 46, 881-884.	1.3	4
64	Structural changes and elastic characteristics of permanently densified vitreous $\text{K}_{\text{x}}\text{Fe}_{\text{y}}\text{Mn}_{\text{z}}\text{O}$ . Physical Review B, 2011, 83, 174102.	3.2	21
65	display="block">\text{K}_{\text{x}}\text{Fe}_{\text{y}}\text{Mn}_{\text{z}}\text{O}. Physical Review B, 2011, 83, 174102.	3.2	6
66	Elastic properties of permanently densified silica: A Raman, Brillouin light, and x-ray scattering study. Physical Review B, 2010, 81, .	3.2	49
67	Vibrational dynamics of permanently densified GeO <sub>2</sub> glasses: Densification-induced changes in the boson peak. Journal of Chemical Physics, 2010, 132, 124508.	3.0	43
68	Jahn-Teller-induced crossover of the paramagnetic response in the singly valent $\text{LaMn}_{\text{x}}\text{PrMn}_{\text{y}}$ . Journal of Chemical Physics, 2010, 132, 124508.	3.2	14
69	High-pressure synthesis and characterization of $\text{LaMn}_{\text{x}}\text{PrMn}_{\text{y}}$ . Physical Review B, 2009, 79, 265102.	3.2	26
70	Study of the mechanical properties of CeO <sub>2</sub> layers with the nanoindentation technique. Thin Solid Films, 2009, 518, 227-232.	1.8	17
71	Silicon carbide thin films for EUV and soft X-ray applications. European Physical Journal: Special Topics, 2009, 169, 159-165.	2.6	12
72	Synthesis and characterization of multiferroic $\text{BiMn}_{\text{x}}\text{Mn}_{\text{y}}$ . Physical Review B, 2009, 79, .	3.2	45

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73	$\text{Jahn-Teller effect on the structure of the high-density single-valent } \text{LaMnO}_3 \text{ system}$	3.2	52	
74	Structural properties and multiferroic phase diagram of $\text{LaMnO}_3$	3.2	25	
75	Optical and spectroscopic characterization of permanently densified $\text{GeO}_2$ glasses. Philosophical Magazine, 2008, 88, 3907-3914.	1.6	9	
76	Acoustic behaviour of normal and densified vitreous $\text{GeO}_2$ . Philosophical Magazine, 2008, 88, 4143-4150.	1.6	10	
77	Pulsed electron deposition (PED) of single buffer layer for "low-cost" YBCO coated conductors. Journal of Physics: Conference Series, 2008, 97, 012197.	0.4	0	
78	Progress on Single Buffer Layered Coated Conductors Prepared by Thermal Evaporation. IEEE Transactions on Applied Superconductivity, 2007, 17, 3413-3416.	1.7	5	
79	<i>In Situ</i> Oxidation of Superconducting YBCO Films by a Supersonic $\text{O}_2$ Beam. IEEE Transactions on Applied Superconductivity, 2007, 17, 3286-3289.	1.7	3	
80	Structural anomalies at the magnetic transition in centrosymmetric $\text{BiMnO}_3$ . Physical Review B, 2007, 75, .	3.2	75	
81	Co-evaporated YBCO/doped-CeO <sub>2</sub> /NiW coated conductors oxygen improved using a supersonic nozzle. Physica C: Superconductivity and Its Applications, 2007, 463-465, 609-614.	1.2	14	
82	Dielectric properties of doping-free $\text{NaMn}_7\text{O}_{12}$ : Origin of the observed colossal dielectric constant. Physical Review B, 2006, 74, .	3.2	19	
83	Multi-chamber deposition system for continuous production of YBCO coated conductors by thermal co-evaporation. Journal of Physics: Conference Series, 2006, 43, 130-133.	0.4	1	
84	Magnetism of pure and electron-doped as seen from. Physica B: Condensed Matter, 2006, 374-375, 44-46.	2.7	1	
85	SR study of double perovskites. Physica B: Condensed Matter, 2006, 374-375, 55-58.	2.7	21	
86	High-pressure growth of $\text{NaMn}_7\text{O}_{12}$ crystals. Journal of Solid State Chemistry, 2006, 179, 3839-3848.	2.9	5	
87	Crystal Growth and Structural Refinement of $\text{NaMn}_7\text{O}_{12}$ . ChemInform, 2006, 37, no.	0.0	0	
88	Progress in the Continuous Deposition of YBCO Coated Conductors by Thermal Co-Evaporation. Advances in Science and Technology, 2006, 47, 17-24.	0.2	1	
89	T phase diagram of $\text{NaMn}_7\text{O}_{12}$ , a double manganese perovskite-like oxide. Journal of Crystal Growth, 2005, 275, e877-e880.	1.5	1	
90	Unusual e g 3d x 2y 2 Orbital Ordering and Low-Energy Excitations in the CE Structure of $\text{NaMn}_7\text{O}_{12}$ . Journal of Superconductivity and Novel Magnetism, 2005, 18, 675-680.	0.5	5	

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91	High-Temperature Polymorphism in Metastable BiMnO <sub>3</sub> . <i>Chemistry of Materials</i> , 2005, 17, 6457-6467.	6.7	80
92	Phase diagram and single crystal structural refinement of NaMn <sub>7</sub> O <sub>12</sub> . <i>Solid State Sciences</i> , 2005, 7, 746-752.	3.2	12
93	Crystal growth and structural refinement of NaMn <sub>7</sub> O <sub>12</sub> . <i>Crystal Research and Technology</i> , 2005, 40, 1072-1075.	1.3	5
94	Phase Diagram and Single Crystal Structural Refinement of NaMn <sub>7</sub> O <sub>12</sub> . <i>ChemInform</i> , 2005, 36, no.	0.0	0
95	Magnetic response of the structure in the doping-free system NaMn <sub>7</sub> O <sub>12</sub> . <i>Physical Review B</i> , 2005, 71, .	3.2	6
96	Room Temperature Polymorphism in Metastable BiMnO <sub>3</sub> Prepared by High-Pressure Synthesis. <i>Chemistry of Materials</i> , 2005, 17, 1765-1773.	6.7	91
97	Charge, orbital and spin ordering phenomena in the mixed valence manganite (NaMn <sub>3+3</sub> )(Mn <sub>3+2</sub> Mn <sub>4+2</sub> )O <sub>12</sub> . <i>Nature Materials</i> , 2004, 3, 48-52.	27.5	115
98	Eu Atomic Motion in EuSr <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> - $\lambda$ and EuBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> - $\lambda$ : A Comparative Mössbauer Study. <i>Journal of Superconductivity and Novel Magnetism</i> , 2004, 17, 409-415.	0.5	0
99	Variations in structural and physical properties of RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> samples submitted to annealing and deoxygenation procedures. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1047-E1049.	2.3	5
100	Dependence of the structural and physical properties of Ru-1212 compound on the thermal treatment and oxygen content. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 187-188.	1.2	2
101	Pressure Effects on Structural and Electronic Properties of Superconductors. , 2004, , 429-446.	1	
102	CHEMICAL TAILORING OF ELECTRONIC DOPING IN YSr <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> - $\delta$ SUPERCONDUCTOR. <i>International Journal of Modern Physics B</i> , 2003, 17, 685-689.	2.0	2
103	CORRELATION BETWEEN LOCAL OXYGEN DISORDER AND ELECTRONIC PROPERTIES IN SUPERCONDUCTING RESR <sub>2</sub> Cu <sub>3</sub> O <sub>6+X</sub> (RE = Y, YB). <i>International Journal of Modern Physics B</i> , 2003, 17, 873-878.	2.0	3
104	Chemical Pressure-Induced Ferromagnetism and Stabilization of the Metallic State in Ba <sub>1-x</sub> Sr <sub>x</sub> V <sub>3</sub> . <i>International Journal of Modern Physics B</i> , 2003, 17, 3503-3508.	2.0	11
105	Superconductivity and microstructure of YSr <sub>2</sub> Cu <sub>3</sub> O <sub>6.875</sub> . <i>Physical Review B</i> , 2002, 66, .	3.2	8
106	Structural, transport, and electronic properties of a layered dichalcogenide AuVS <sub>2</sub> with semimetallic properties. <i>Physical Review B</i> , 2002, 66, .	3.2	8
107	Can the structure of the Ti or V Magnoli binary oxides host superconductivity?. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 338, 1-8.	1.2	13
108	Mechanical against chemical pressure in the Y(Ba <sub>1-x</sub> Sr <sub>x</sub> ) <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> - $\delta$ system. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 375-378.	1.2	11

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109	Structure and superconductivity of $\text{YSr}_2\text{Cu}_3\text{O}_{7-\delta}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 605-606.		1.2	14
110	Crystal and electronic structures of superconducting $\text{YSr}_2\text{Cu}_3\text{O}_{6+x}$ . , 2000, , .			4
111	HIGH PRESSURE SYNTHESIS AND CHARACTERIZATION OF $\text{YSr}_2\text{Cu}_3\text{O}_w$ . <i>International Journal of Modern Physics B</i> , 2000, 14, 2658-2663.		2.0	2
112	Uniformity and physical properties of semi-insulating Fe-doped InP after wafer or ingot annealing. <i>Journal of Applied Physics</i> , 1997, 82, 3836-3845.		2.5	18
113	Growth of semi-insulating InP with uniform axial Fe doping by a double-crucible LEC technique. <i>Journal of Crystal Growth</i> , 1997, 179, 57-66.		1.5	2
114	Homogeneity of thermally annealed Fe-doped InP wafers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 44, 233-237.		3.5	7
115	A Study of Convection, Striations and Interface Shape in InP Crystals Grown by the Double-Crucible LEC Technique. <i>Crystal Research and Technology</i> , 1997, 32, 1085-1093.		1.3	2
116	A study of iron incorporation in LEC-grown indium phosphide. <i>Journal of Crystal Growth</i> , 1996, 166, 572-577.		1.5	6
117	Growth Striations in GaAs as Revealed by DSL Photoetching. <i>Materials Science Forum</i> , 1996, 203, 13-18.		0.3	2
118	Immobilization of a pectinlyase from <i>Aspergillus niger</i> for application in food technology. <i>Enzyme and Microbial Technology</i> , 1995, 17, 729-738.		3.2	41
119	Partial characterization of <i>Vitis vinifera</i> grapes var. Ancellotta. <i>LWT - Food Science and Technology</i> , 1995, 28, 635-637.		5.2	1