Javier Rodriguez-Viejo

List of Publications by Year
in descending order

123 papers	6,856 citations	145106 33 h-index	68831 81 g-index
127 all docs	127 docs citations	127 times ranked	9060 citing authors

#	Article	IF	Citations
1	Ultrastable glasses: new perspectives for an old problem. Rivista Del Nuovo Cimento, 2022, 45, 325-406.	2.0	26
2	A Generalized Approach for Evaluating the Mechanical Properties of Polymer Nanocomposites Reinforced with Spherical Fillers. Nanomaterials, 2021, 11, 830.	1.9	15
3	Beating the Thermal Conductivity Alloy Limit Using Long-Period Compositionally Graded Si_{1â€“x}Ge_x Superlattices. Journal of Physical Chemistry C, 2020, 124, 19864-19872.	1.5	9
4	Nucleation and Growth of the Supercooled Liquid Phase Control Glass Transition in Bulk Ultrastable Glasses. Physical Review Letters, 2020, 124, 076002.	2.9	19
5	Growth Monitoring With Submonolayer Sensitivity Via Real-Time Thermal-Conductance Measurements. Physical Review Applied, 2019, 12, .	1.5	1
6	Bridging the local configurations and crystalline counterparts of bulk metallic glass by nanocalorimetry. Journal of Materials Research and Technology, 2019, 8, 3603-3611.	2.6	7
7	Surface-Bulk Interplay in Vapor-Deposited Glasses: Crossover Length and the Origin of Front Transformation. Physical Review Letters, 2019, 123, 155501.	2.9	16
8	Thermoelectric Photosensor Based on Ultrathin Single-Crystalline Si Films â€. Sensors, 2019, 19, 1427.	2.1	1
9	Multiple glass transitions in vapor-deposited orientational glasses of the most fragile plastic crystal Freon 113. Physical Chemistry Chemical Physics, 2019, 21, 10436-10441.	1.3	3
10	Measuring Device and Material ZT in a Thin-Film Si-Based Thermoelectric Microgenerator. Nanomaterials, 2019, 9, 653.	1.9	9
11	Emergence of a substrate-temperature-dependent dielectric process in a prototypical vapor deposited hole-transport glass. Scientific Reports, 2018, 8, 1380.	1.6	7
12	Secondary relaxation in ultrastable etoricoxib: evidence of correlation with structural relaxation. Physical Chemistry Chemical Physics, 2018, 20, 3939-3945.	1.3	19
13	Thermoelectric Microsensor Based on Ultrathin Si Films. Proceedings (mdpi), 2018, 2, .	0.2	0
14	Kinetic arrest of front transformation to gain access to the bulk glass transition in ultrathin films of vapour-deposited glasses. Physical Chemistry Chemical Physics, 2018, 20, 29989-29995.	1.3	19
15	High-performance organic light-emitting diodes comprising ultrastable glass layers. Science Advances, 2018, 4, eaar8332.	4.7	113
16	Impact of pore anisotropy on the thermal conductivity of porous Si nanowires. Scientific Reports, 2018, 8, 12796.	1.6	16
17	Distinguishing different classes of secondary relaxations from vapour deposited ultrastable glasses. Physical Chemistry Chemical Physics, 2018, 20, 21925-21933.	1.3	21
18	Evidence of thermal transport anisotropy in stable glasses of vapor deposited organic molecules. Physical Review Materials, 2018, 2, .	0.9	17

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19	The role of thermodynamic stability in the characteristics of the devitrification front of vapour-deposited glasses of toluene. Physical Chemistry Chemical Physics, 2017, 19, 11089-11097.	1.3	29
20	Beating Homogeneous Nucleation and Tuning Atomic Ordering in Glass-Forming Metals by Nanocalorimetry. Nano Letters, 2017, 17, 7751-7760.	4.5	34
21	Quasi-adiabatic, Membrane-Based, Highly Sensitive Fast Scanning Nanocalorimetry. , 2016, , 105-149.		2
22	Relaxation dynamics of glasses along a wide stability and temperature range. Scientific Reports, 2016, 6, 35607.	1.6	28
23	Ultrastable glasses portray similar behaviour to ordinary glasses at high pressure. Scientific Reports, 2016, 6, 34296.	1.6	14
24	Vanadium-doped zinc oxide films for piezoelectric application. Nanomaterials and Energy, 2015, 4, 109-117.	0.1	6
25	Simultaneous nanocalorimetry and fast XRD measurements to study the silicide formation in Pd/a-Si bilayers. Journal of Synchrotron Radiation, 2015, 22, 717-722.	1.0	7
26	Transformation kinetics of vapor-deposited thin film organic glasses: the role of stability and molecular packing anisotropy. Physical Chemistry Chemical Physics, 2015, 17, 31195-31201.	1.3	41
27	Probing equilibrium glass flow up to exapoise viscosities. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2331-2336.	3.3	40
28	Do tunneling states and boson peak persist or disappear in extremely stabilized glasses?. Low Temperature Physics, 2015, 41, 412-418.	0.2	4
29	Tailoring thermal conductivity by engineering compositional gradients in Si1â^'x Ge x superlattices. Nano Research, 2015, 8, 2833-2841.	5.8	31
30	Highly stable glasses of celecoxib: Influence on thermo-kinetic properties, microstructure and response towards crystal growth. Journal of Non-Crystalline Solids, 2015, 407, 256-261.	1.5	46
31	In-plane thermal conductivity of sub-20 nm thick suspended mono-crystalline Si layers. Nanotechnology, 2014, 25, 185402.	1.3	31
32	Micropower thermoelectric generator from thin Si membranes. Nano Energy, 2014, 4, 73-80.	8.2	56
33	Suppression of tunneling two-level systems in ultrastable glasses of indomethacin. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11275-11280.	3.3	114
34	Evaluation of Growth Front Velocity in Ultrastable Glasses of Indomethacin over a Wide Temperature Interval. Journal of Physical Chemistry B, 2014, 118, 10795-10801.	1.2	47
35	Using high pressure to unravel the mechanism of visible emission in amorphous Si/SiOxnanoparticles. Physical Review B, 2014, 89, .	1.1	14
36	Kinetics of silicide formation over a wide range of heating rates spanning six orders of magnitude. Applied Physics Letters, 2014, 105, .	1.5	12

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37	Review on measurement techniques of transport properties of nanowires. Nanoscale, 2013, 5, 11526.	2.8	91
38	Formation of Pd2Si on single-crystalline Si (100) at ultrafast heating rates: An in-situ analysis by nanocalorimetry. Applied Physics Letters, 2013, 102, .	1.5	20
39	Reduction of the deposition temperature of high quality EuO films on Yttria Stabilized Zirconia by incorporating an MgO buffer layer. Thin Solid Films, 2013, 531, 466-470.	0.8	2
40	Acoustic-like dynamics of amorphous drugs in the THz regime. Scientific Reports, 2013, 3, 2518.	1.6	12
41	Glass transition in ultrathin films of amorphous solid water. Journal of Chemical Physics, 2012, 137, 244506.	1.2	33
42	Comprehensive characterization of thermophysical properties in solids using thermal impedance. Journal of Applied Physics, 2012, 112, .	1.1	3
43	Anomalous Transformation of Vapor-Deposited Highly Stable Glasses of Toluene into Mixed Glassy States by Annealing Above T_g. Journal of Physical Chemistry Letters, 2012, 3, 919-923.	2.1	33
44	Microstructure evolution and grain size distribution in nanocrystalline FeNbBCu from synchrotron XRD and TEM analysis. Journal of Non-Crystalline Solids, 2012, 358, 107-113.	1.5	27
45	In situ infrared thermographic screening of compositional spread Mgâ€“Ti thin-film libraries. Journal of Alloys and Compounds, 2011, 509, 6497-6501.	2.8	2
46	Preface: Phys. Status Solidi C 11-12/2011. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3036-3037.	0.8	0
47	Infrared imaging tool for screening catalyst effect on hydrogen storing thin film libraries. Catalysis Today, 2011, 159, 144-149.	2.2	4
48	Thermal conductivity of thin single-crystalline germanium-on-insulator structures. International Journal of Heat and Mass Transfer, 2011, 54, 1959-1962.	2.5	16
49	Accelerated Aging in Ultrathin Films of a Molecular Glass Former. Physical Review Letters, 2011, 107, 025901.	2.9	39
50	Evidence of finite-size effect on the NÃ©el temperature in ultrathin layers of CoO nanograins. Physical Review B, 2011, 83, .	1.1	60
51	Fabrication, characterization and modeling of single-crystal thin film calorimeter sensors. Thermochimica Acta, 2010, 510, 126-136.	1.2	19
52	Glass forming ability and nanocrystallization kinetics of Fe65Nb10B25 metallic glasses. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1114-1117.	0.8	0
53	Analytical expression for thermal conductivity of superlattices. Journal of Applied Physics, 2010, 107, .	1.1	46
54	Ultra-Low Thermal Conductivity in Nanoscale Layered Oxides. Journal of Heat Transfer, 2010, 132, .	1.2	15

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55	Temperature dependent thermal conductivity of polycrystalline ZnO films. Journal of Applied Physics, 2010, 107, .	1.1	74
56	Size Effects and Extraordinary Stability of Ultrathin Vapor Deposited Glassy Films of Toluene. Journal of Physical Chemistry Letters, 2010, 1, 341-345.	2.1	50
57	Effect of minor additions on the glass forming ability and magnetic properties of Feâ€“Nbâ€“B based metallic glasses. Intermetallics, 2010, 18, 773-780.	1.8	30
58	Effect of minor Co additions on the crystallization and magnetic properties of Fe(Co)NbBCu alloys. Journal of Alloys and Compounds, 2010, 496, 202-207.	2.8	19
59	Stability of thin film glasses of toluene and ethylbenzene formed by vapor deposition: an in situ nanocalorimetric study. Physical Chemistry Chemical Physics, 2010, 12, 14693-14698.	1.3	119
60	Crystallisation of Amorphous Germanium Thin Films. Journal of Nanoscience and Nanotechnology, 2009, 9, 3013-3019.	0.9	11
61	Structural and magnetic characterization of FeNbBCu alloys as a function of Nb content. Journal Physics D: Applied Physics, 2009, 42, 095010.	1.3	24
62	Evaluation of the liquidâ€“solid interfacial energy from crystallization kinetic data. Scripta Materialia, 2009, 61, 879-882.	2.6	8
63	Glass transition in vapor deposited thin films of toluene. Thermochimica Acta, 2009, 492, 51-54.	1.2	62
64	Bulk soft magnetic materials from ball-milled Fe77Nb7B15Cu1 amorphous ribbons. Intermetallics, 2009, 17, 79-85.	1.8	14
65	Extension of the 3Ï‰ method to measure the thermal conductivity of thin films without a reference sample. Sensors and Actuators A: Physical, 2008, 142, 232-236.	2.0	33
66	Ellipsometric study of crystallization of amorphous Ge thin films embedded in SiO2. Thin Solid Films, 2008, 516, 4277-4281.	0.8	10
67	Ellipsometric measurements of quantum confinement effects on higher interband transitions of Ge nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 888-891.	0.8	4
68	Power compensated thin film calorimetry at fast heating rates. Sensors and Actuators A: Physical, 2008, 143, 256-264.	2.0	38
69	Microchip power compensated calorimetry applied to metal hydride characterization. International Journal of Hydrogen Energy, 2008, 33, 2729-2737.	3.8	6
70	Structure and thermomagnetic properties of powders produced from melt spun FeNbBCu ribbons. Journal of Non-Crystalline Solids, 2008, 354, 3858-3863.	1.5	5
71	Effect of Nb in the nanocrystallization and magnetic properties of FeNbBCu amorphous alloys. Journal of Non-Crystalline Solids, 2008, 354, 5110-5112.	1.5	13
72	Primary crystallization in Fe65Nb10B25 metallic glass. Journal of Non-Crystalline Solids, 2008, 354, 5120-5122.	1.5	2

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73	Nanocalorimetric analysis of the ferromagnetic transition in ultrathin films of nickel. Applied Physics Letters, 2008, 92, .	1.5	25
74	In situ nanocalorimetry of thin glassy organic films. Journal of Chemical Physics, 2008, 129, 181101.	1.2	54
75	Cross-plane thermal conductivity reduction of vertically uncorrelated Geâ•Si quantum dot superlattices. Applied Physics Letters, 2008, 93, .	1.5	24
76	Interfacial effects on the thermal conductivity of a-Ge thin films grown on Si substrates. Journal of Applied Physics, 2008, 104, .	1.1	15
77	Nanocrystallization kinetics and glass forming ability of theFe65Nb10B25metallic alloy. Physical Review B, 2007, 76, .	1.1	25
78	Time resolved x-ray reflectivity study of interfacial reactions inCuâ•Mgthin films during heat treatment. Physical Review B, 2007, 75, .	1.1	11
79	Influence of composition in the crystallization process of Fe75â˜xNb10B15+x metallic glasses. Journal of Non-Crystalline Solids, 2007, 353, 842-844.	1.5	18
80	Combinatorial Synthesis and Hydrogenation of Mg/Al Libraries Prepared by Electron Beam Physical Vapor Deposition. ACS Combinatorial Science, 2007, 9, 230-236.	3.3	33
81	Size-dependent melting and supercooling of Ge nanoparticles embedded in a SiO2 thin film. Thermochimica Acta, 2007, 461, 82-87.	1.2	56
82	Design issues involved in the development of a membrane-based high-temperature nanocalorimeter. Microelectronic Engineering, 2007, 84, 1288-1291.	1.1	22
83	Hydrogenation properties of pure magnesium and magnesiumâ€“aluminium thin films. Journal of Power Sources, 2007, 169, 117-122.	4.0	41
84	Nanocalorimetric high-temperature characterization of ultrathin films of a-Ge. Materials Science in Semiconductor Processing, 2006, 9, 806-811.	1.9	14
85	Heat transfer in symmetric U-shaped microreactors for thin film calorimetry. Journal of Micromechanics and Microengineering, 2006, 16, 965-971.	1.5	38
86	Influence of layer microstructure on the double nucleation process in Cuâ•Mg multilayers. Journal of Applied Physics, 2006, 100, 113522.	1.1	5
87	Hyperfine Field Distributions during Nanocrystallization in Fe65Nb10B25. AIP Conference Proceedings, 2005, , .	0.3	1
88	Calorimetry of microbial growth using a thermopile based microreactor. Thermochimica Acta, 2005, 427, 187-191.	1.2	53
89	Primary Transformation Rate Measurements Through Differential Scanning Calorimetry. Monatshefte FÃ¼r Chemie, 2005, 136, 1947-1953.	0.9	2
90	Isokinetic analysis of nanocrystallization in an Alâ€“Ndâ€“Ni amorphous alloy. Journal of Physics Condensed Matter, 2005, 17, 4897-4910.	0.7	12

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91	Sensitive power compensated scanning calorimeter for analysis of phase transformations in small samples. Review of Scientific Instruments, 2005, 76, 065104.	0.6	51
92	Calorimetric evidence of asymmetry in the nucleation ofCuMg2in Cu/Mg multilayers. Physical Review B, 2004, 69, .	1.1	5
93	Spectroscopic ellipsometry studies on polycrystalline Cd0.9Zn0.1Te thin films. Physica Status Solidi A, 2004, 201, 782-790.	1.7	1
94	Mechanisms driving primary crystallization of Al87Ni7Cu3Nd3 amorphous alloy. Acta Materialia, 2004, 52, 2819-2826.	3.8	35
95	Thermodynamic description of the Cuî—¸O system. Journal of Alloys and Compounds, 2004, 377, 8-16.	2.8	33
96	Devitrification process in rapidly solidified Al-Ni-Cu-Nd metallic glass. Central South University, 2003, 10, 163-167.	0.5	1
97	Calorimetric and x-ray analysis of the intermediate phase formation in Cu/Mg multilayers. Journal of Applied Physics, 2003, 93, 4447-4453.	1.1	5
98	Physical and Mechanical Behavior of Zirconia-Hydroxyapatite Ceramics after Aging in Simulated Body Fluid. Key Engineering Materials, 2002, 218-220, 161-164.	0.4	1
99	Microreactors for Thin-Film Calorimetry. Materials Research Society Symposia Proceedings, 2002, 741, 241.	0.1	0
100	Thermal characterization and modeling of intermediate phase formation in 20/80 nm and 10/20 nm Cu/Mg multilayers. Materials Research Society Symposia Proceedings, 2002, 749, 1.	0.1	0
101	Mechanical Behaviour of New Zirconia-Hydroxyapatite Ceramic Materials. Key Engineering Materials, 2001, 192-195, 151-154.	0.4	9
102	Neutron diffraction and calorimetric study on Al-based metallic glasses. Journal of Non-Crystalline Solids, 2001, 287, 162-166.	1.5	11
103	Residual stress and texture in poly-SiC films grown by low-pressure organometallic chemical-vapor deposition. Journal of Applied Physics, 2000, 87, 1748-1758.	1.1	34
104	Stress in Poly-SiC Films Grown by Low Pressure CVD. Materials Science Forum, 2000, 347-349, 477-485.	0.3	1
105	Evidence of photo- and electrodarkening of (CdSe)ZnS quantum dot composites. Journal of Applied Physics, 2000, 87, 8526-8534.	1.1	62
106	Dynamical X-ray diffraction analysis of Solid Phase Epitaxy growth of Si1-yCy heterostructures. Materials Research Society Symposia Proceedings, 2000, 647, 1.	0.1	0
107	Zirconia-toughened hydroxyapatite ceramic obtained by wet sintering. Journal of Materials Science: Materials in Medicine, 1999, 10, 715-719.	1.7	41
108	Nucleation behavior during the first stages of SiC growth on different substrates. European Physical Journal Special Topics, 1999, 09, Pr8-1069-Pr8-1074.	0.2	0

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109	Synthesis of CdSe quantum dotâ€“ZnS matrix thin films via electrospray organometallic chemical vapor deposition. Journal of Crystal Growth, 1998, 195, 564-568.	0.7	37
110	<title>Electroluminescence and cathodoluminescence from inorganic CdSe nanocrystals embedded in thin films</title>. , 1998, , .		1
111	Growth and Stress Characterization of LPCVD SiC Films Deposited on Bare, Carbonized and Oxidized Si(001) Substrates. Materials Research Society Symposia Proceedings, 1998, 555, 173.	0.1	0
112	Cathodoluminescence and photoluminescence of highly luminescent CdSe/ZnS quantum dot composites. Applied Physics Letters, 1997, 70, 2132-2134.	1.5	132
113	Growth of SiC films obtained by LPCVD. Diamond and Related Materials, 1997, 6, 1306-1310.	1.8	26
114	(CdSe)ZnS Coreâ^'Shell Quantum Dots:Â Synthesis and Characterization of a Size Series of Highly Luminescent Nanocrystallites. Journal of Physical Chemistry B, 1997, 101, 9463-9475.	1.2	3,916
115	Synthesis and Characterization of Highly Luminescent (CdSe)ZnS Quantum Dots. Materials Research Society Symposia Proceedings, 1996, 452, 359.	0.1	1
116	Cathodoluminescence of CdSe/ZnS Quantum Dot Composites. Materials Research Society Symposia Proceedings, 1996, 452, 365.	0.1	1
117	Synthesis of CdSe/ZnS Quantum Dot Composites for Electroluminescent Devices. Materials Research Society Symposia Proceedings, 1996, 424, 477.	0.1	2
118	Growth morphology of low-pressure metalorganic chemical vapor deposition silicon carbide on substrates. Journal of Crystal Growth, 1995, 155, 214-222.	0.7	16
119	High-temperature oxidation of CVD Î²-SiC part I. Experimental study. Journal of the European Ceramic Society, 1994, 13, 167-175.	2.8	19
120	High-temperature oxidation of CVD Î²-SiC part II. Relation between oxygen diffusion coefficients and parabolic rate constants. Journal of the European Ceramic Society, 1994, 13, 177-184.	2.8	16
121	18O diffusion through amorphous SiO2and cristobalite. Applied Physics Letters, 1993, 63, 1906-1908.	1.5	62
122	AES study of the SiO2/SiC interface in the oxidation of CVD Î²-SiC. Surface Science, 1992, 271, 237-243.	0.8	23
123	Kinetics and crystallization studies by in situ X-ray diffraction of the oxidation of chemically vapour deposited SiC. Thin Solid Films, 1991, 204, 217-227.	0.8	25