

Carlos Pecharróm̃n

List of Publications by Year in descending order

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108
papers

4,604
citations

109264

35
h-index

106281

65
g-index

109
all docs

109
docs citations

109
times ranked

5854
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal annealing of natural rubber films controls wettability and enhances cytocompatibility. <i>Surfaces and Interfaces</i> , 2022, 31, 102048.	1.5	2
2	Lead-free low-melting-point glass as bonding agent for TiO ₂ nanoparticles. <i>Ceramics International</i> , 2021, 47, 6114-6120.	2.3	5
3	Surface Wettability of a Natural Rubber Composite under Stretching: A Model to Predict Cell Survival. <i>Langmuir</i> , 2021, 37, 4639-4646.	1.6	4
4	Colored Surfaces Made of Synthetic Eumelanin. <i>Nanomaterials</i> , 2021, 11, 2320.	1.9	0
5	Experimental and Theoretical Investigations on the Structural, Electronic, and Vibrational Properties of Cs ₂ AgSbCl ₆ Double Perovskite. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 18918-18928.	1.8	26
6	Unveiling the infrared complex dielectric function of ilmenite CdTiO ₃ . <i>Journal of Alloys and Compounds</i> , 2020, 813, 152136.	2.8	6
7	Vacancies in Self-Assembled Crystals: An Archetype for Clusters Statistics at the Nanoscale. <i>Small</i> , 2020, 16, e2002735.	5.2	2
8	Synthesis, characterization and applications of low temperature melting glasses belonging to P ₂ O ₅ CaO Na ₂ O system. <i>Ceramics International</i> , 2019, 45, 12234-12242.	2.3	13
9	First results of Resistive-Plate Well (RPWELL) detector operation at 163 K. <i>Journal of Instrumentation</i> , 2019, 14, P10014-P10014.	0.5	6
10	Color Engineering of Silicon Nitride Surfaces to Characterize the Polydopamine Refractive Index. <i>ChemPhysChem</i> , 2018, 19, 3418-3424.	1.0	14
11	Unprecedented simultaneous enhancement in damage tolerance and fatigue resistance of zirconia/Ta composites. <i>Scientific Reports</i> , 2017, 7, 44922.	1.6	38
12	Micropillar Templates for Dielectric Filled Metal Arrays and Flexible Metamaterials. <i>Advanced Optical Materials</i> , 2017, 5, 1600670.	3.6	10
13	Magnetic modulation of mid-infrared plasmons using Giant Magnetoresistance. <i>Optics Express</i> , 2017, 25, 18784.	1.7	8
14	Spark Plasma Sintered Si ₃ N ₄ /TiN Nanocomposites Obtained by a Colloidal Processing Route. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-9.	1.5	10
15	Monodisperse Silica Spheres Ensembles with Tailored Optical Resonances in the Visible. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 871-877.	1.2	12
16	Antiresonance in (Ni,Zn) ferrite-carbon nanofibres nanocomposites. <i>Materials Research Express</i> , 2015, 2, 055003.	0.8	2
17	Dielectric behavior of ceramic-graphene composites around the percolation threshold. <i>Nanoscale Research Letters</i> , 2015, 10, 216.	3.1	18
18	Hydrogen Spillover between Single Gold Nanorods and Metal Oxide Supports: A Surface Plasmon Spectroscopy Study. <i>ACS Nano</i> , 2015, 9, 7846-7856.	7.3	65

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19	Determination of the Optical Constants of Gold Nanoparticles from Thin-Film Spectra. Journal of Physical Chemistry C, 2015, 119, 9450-9459.	1.5	14
20	Faraday activity in flexible maghemite/polymer matrix composites. Optical Materials Express, 2015, 5, 1927.	1.6	3
21	High barium content lead and alkaline-free glasses. Materials Letters, 2014, 136, 345-348.	1.3	5
22	High wear resistance white ceramic glaze containing needle like zircon single crystals by the addition of sepiolite n-ZrO ₂ . Journal of the European Ceramic Society, 2013, 33, 3379-3385.	2.8	25
23	Kinetics of dissolution of a biocide soda-lime glass powder containing silver nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	5
24	Dielectric properties of carbon nanofibre/alumina composites. Carbon, 2013, 57, 380-387.	5.4	15
25	Magneto-optical Faraday activity in transparent FeCo-sepiolite/polystyrene nanocomposites. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	8
26	Conductivity and charge depletion aging of resistive electrodes for high rate RPCs. Journal of Instrumentation, 2013, 8, P01022-P01022.	0.5	4
27	Faradaic current in different mullite materials: single crystal, ceramic and cermets. International Journal of Materials Research, 2012, 103, 408-411.	0.1	4
28	Multiscale gold and silver plasmonic plastics by melt compounding. RSC Advances, 2012, 2, 915-919.	1.7	11
29	Nanopore Characterization and Optical Modeling of Transparent Polycrystalline Alumina. Advanced Functional Materials, 2012, 22, 2303-2309.	7.8	49
30	Ceria doped alumina by Spark Plasma Sintering for optical applications. Journal of the European Ceramic Society, 2012, 32, 2917-2924.	2.8	20
31	Transparent alumina by vacuum sintering. Journal of the European Ceramic Society, 2012, 32, 2925-2933.	2.8	54
32	Fuerzas de repulsión de aditivos superplastificantes en sistemas de escoria granulada de horno alto en medios alcalinos, desde medidas de AFM a propiedades reológicas. Materiales De Construccion, 2012, 62, 489-513.	0.2	31
33	Fabrication of Nanostructured Metallized Glazes by Conventional Fast Firing Route. Journal of the American Ceramic Society, 2011, 94, 2067-2073.	1.9	7
34	Palladium nanoparticles on silica-rich substrates by spontaneous reduction at room temperature. Journal of Nanoparticle Research, 2011, 13, 5239-5249.	0.8	10
35	Glass Powders with a High Content of Calcium Oxide: A Step Towards a "Green" Universal Biocide. Advanced Engineering Materials, 2011, 13, B256.	1.6	35
36	Reliability assessment in advanced nanocomposite materials for orthopaedic applications. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 303-314.	1.5	63

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37	Stabilization of superparamagnetic nickel nanoparticles in a sepiolite matrix. <i>Journal of Nanoparticle Research</i> , 2010, 12, 1221-1229.	0.8	9
38	Electrical discharge machining of ceramic/semiconductor/metal nanocomposites. <i>Scripta Materialia</i> , 2010, 63, 219-222.	2.6	26
39	Transparent Alumina/Ceria Nanocomposites By Spark Plasma Sintering. <i>Advanced Engineering Materials</i> , 2010, 12, 1154-1160.	1.6	31
40	High Antibacterial and Antifungal Activity of Silver Monodispersed Nanoparticles Embedded in a Glassy Matrix. <i>Advanced Engineering Materials</i> , 2010, 12, B292.	1.6	23
41	Electric Field Enhancement and Conduction Mechanisms in Ni/BaTiO ₃ Percolative Composites. <i>Ferroelectrics</i> , 2010, 400, 81-88.	0.3	9
42	The antibacterial and antifungal activity of a soda-lime glass containing silver nanoparticles. <i>Nanotechnology</i> , 2009, 20, 085103.	1.3	80
43	Synthesis, Conforming, Linear, and Non-linear Optical Properties of Gold Nanoparticles-sepiolite Compacts. <i>Plasmonics</i> , 2009, 4, 261-266.	1.8	11
44	The role of the Resistive Plate response function in bringing an RPC to a stationary situation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 602, 713-718.	0.7	7
45	Slow crack growth resistance and bridging stress determination in alumina-rich magnesium aluminate spinel/tungsten composites. <i>Acta Materialia</i> , 2009, 57, 2121-2127.	3.8	4
46	On the transparency of nanostructured alumina: Rayleigh-Gans model for anisotropic spheres. <i>Optics Express</i> , 2009, 17, 6899.	1.7	62
47	Antibacterial and antifungal activity of a soda-lime glass containing copper nanoparticles. <i>Nanotechnology</i> , 2009, 20, 505701.	1.3	124
48	Influence of the close sphere interaction on the surface plasmon resonance absorption peak. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 5922.	1.3	17
49	Infrared and Raman spectroscopy of mullite-type Bi ₂ Ga ₄ O ₉ . <i>Crystal Research and Technology</i> , 2008, 43, 1230-1239.	0.6	23
50	The role of magnesium on the stability of crystalline sepiolite structure. <i>Journal of the European Ceramic Society</i> , 2008, 28, 1763-1768.	2.8	65
51	Influence of ceramic-metal interface adhesion on crack growth resistance of ZrO ₂ -Nb ceramic matrix composites. <i>Acta Materialia</i> , 2008, 56, 3358-3366.	3.8	56
52	On the Nature and Location of Nanoparticulate Iron Phases and Their Precursors Synthetized within a Sepiolite Matrix. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2864-2871.	1.5	17
53	Epitaxial growth of tungsten nanoparticles on alumina and spinel surfaces. <i>Nanotechnology</i> , 2008, 19, 215605.	1.3	12
54	Redshift of surface plasmon modes of small gold rods due to their atomic roughness and end-cap geometry. <i>Physical Review B</i> , 2008, 77, .	1.1	47

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55	Understanding Carbon-Carbon Composites as Electrodes of Supercapacitors. Journal of the Electrochemical Society, 2007, 154, A579.	1.3	31
56	Micro/nano composites: a simple and safe way to fabricate nanomaterials. International Journal of Nanotechnology, 2007, 4, 282.	0.1	7
57	Diamond-like Hardening of Alumina/Ni Nanocomposites. Advanced Engineering Materials, 2007, 9, 898-901.	1.6	29
58	Synergistic toughening mechanism in 3Y-TZP/Nb composites. Acta Materialia, 2007, 55, 5924-5933.	3.8	39
59	The challenge of ceramic/metal microcomposites and nanocomposites. Progress in Materials Science, 2007, 52, 1017-1090.	16.0	296
60	Iron-oxide nanoparticles supported on sepiolite as a novel humidity sensor. Journal of the European Ceramic Society, 2007, 27, 1983-1989.	2.8	35
61	Anomalous high activation energy for creep in nanostructured 3YTZP/Ni cermets. Journal of the European Ceramic Society, 2007, 27, 3295-3299.	2.8	3
62	Scaling the h-index for different scientific ISI fields. Scientometrics, 2007, 73, 303-320.	1.6	171
63	Obtaining Ni Nanoparticles on 3Y-TZP Powder from Nickel Salts. Journal of the American Ceramic Society, 2006, 89, 144-150.	1.9	10
64	Monodisperse and Corrosion-Resistant Metallic Nanoparticles Embedded into Sepiolite Particles for Optical and Magnetic Applications. Journal of the American Ceramic Society, 2006, 89, 3043-3049.	1.9	56
65	Percolative mechanism of sliding wear in alumina/zirconia composites. Journal of the European Ceramic Society, 2006, 26, 2619-2625.	2.8	34
66	Analysis of texture and microstructure of anatase thin films by Fourier transform infrared spectroscopy. Thin Solid Films, 2006, 515, 1585-1591.	0.8	9
67	Antibacterial activity of copper monodispersed nanoparticles into sepiolite. Journal of Materials Science, 2006, 41, 5208-5212.	1.7	188
68	Mechanical properties and interfaces of zirconia/nickel in micro - and nanocomposites. Journal of Materials Science, 2006, 41, 5194-5199.	1.7	26
69	Silver nanoparticles supported on γ -, β - and α -alumina. Journal of the European Ceramic Society, 2006, 26, 1-7.	2.8	33
70	RuO ₂ ·xH ₂ O/NiO composites as electrodes for electrochemical capacitors. Electrochimica Acta, 2006, 51, 4693-4700.	2.6	35
71	Drastic Surface Plasmon Mode Shifts in Gold Nanorods Due to Electron Charging. Plasmonics, 2006, 1, 61-66.	1.8	150
72	Expansion of the spectral representation function of a composite material in a basis of Legendre polynomials: Experimental determination and analytic approximations. Physical Review B, 2006, 74, .	1.1	10

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73	Zirconia/nickel interfaces in micro- and nanocomposites. International Journal of Materials Research, 2005, 96, 507-514.	0.8	18
74	Synthesis, Thermal Evolution, and Luminescence Properties of Yttrium Disilicate Host Matrix. Chemistry of Materials, 2005, 17, 1774-1782.	3.2	76
75	Nanostructured Ceramic Oxides with a Slow Crack Growth Resistance Close to Covalent Materials. Nano Letters, 2005, 5, 1297-1301.	4.5	79
76	Calculation of adsorption-induced differential external reflectance infrared spectra of particulate metals deposited on a substrate. Journal of Electroanalytical Chemistry, 2004, 563, 91-109.	1.9	34
77	Theoretical Model of Hardening in Zirconia-Nickel Nanoparticle Composites. Nano Letters, 2004, 4, 747-751.	4.5	30
78	Percolative Mechanism of Aging in Zirconia-Containing Ceramics for Medical Applications. Advanced Materials, 2003, 15, 507-511.	11.1	83
79	Determination of texture by infrared spectroscopy in titanium oxide anatase thin films. Journal of Applied Physics, 2003, 93, 4634-4645.	1.1	49
80	An effective-medium approach to the optical properties of heterogeneous materials with nonlinear properties. Journal of Modern Optics, 2003, 50, 113-135.	0.6	0
81	Optical properties of binary composite materials with two nonlinear components. Journal of Modern Optics, 2003, 50, 1857-1871.	0.6	0
82	Dielectric and Ferroelectric Properties of BaTiO ₃ /Ni Cermets Under High Electric Fields. Ferroelectrics, 2002, 268, 387-392.	0.3	1
83	Zirconia/stainless-steel continuous functionally graded material. Journal of the European Ceramic Society, 2002, 22, 2799-2804.	2.8	37
84	Electric field enhancement of the Rabi splitting in a superlattice-microcavity system. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 398-402.	1.3	0
85	Mechanically Stable Monoclinic Zirconia-Nickel Composite. Journal of the American Ceramic Society, 2002, 85, 2119-2121.	1.9	13
86	Comments on the paper by M.-S. Zheng and S.-G. Sun entitled "In situ FTIR spectroscopic studies of CO adsorption on electrodes with nanometer-scale thin films of ruthenium in sulfuric acid solutions" [J. Electroanal. Chem. 500 (2001) 223]. Journal of Electroanalytical Chemistry, 2002, 529, 145-154.	1.9	27
87	New Percolative BaTiO ₃ -Ni Composites with a High and Frequency-Independent Dielectric Constant (ϵ_r) Tj ETQq1_1 0.784314 rgB 11.1 346	11.1	346
88	Microstructure and Ionic Conductivity of LiSn ₂ P ₃ O ₁₂ -Teflon Composites. Journal of the Electrochemical Society, 2001, 148, J31.	1.3	0
89	Enhancement of Rabi splitting in a microcavity with an embedded superlattice. Physical Review B, 2001, 64, .	1.1	9
90	Photoluminescence excitation spectroscopy of semiconductor microcavities. Physical Review B, 2001, 64, .	1.1	6

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91	Evidence of Nearest-Neighbor Ordering in Wet-Processed Zirconia-Nickel Composites. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2439-2441.	1.9	27
92	Experimental Evidence of a Giant Capacitance in Insulator-Conductor Composites at the Percolation Threshold. <i>Advanced Materials</i> , 2000, 12, 294-297.	11.1	286
93	Thermal evolution of infrared vibrational properties of $\text{Li}_4/3\text{Ti}_5/3\text{O}_4$ measured by specular reflectance. <i>Physical Review B</i> , 2000, 62, 12062-12068.	1.1	21
94	Thermal Evolution of Transitional Aluminas Followed by NMR and IR Spectroscopies. <i>Journal of Physical Chemistry B</i> , 1999, 103, 6160-6170.	1.2	198
95	Signatures of exciton-cavity coupling in semiconductor microcavities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1998, 2, 685-688.	1.3	8
96	Room temperature triclinic modification of NASICON-type $\text{LiZr}_2(\text{PO}_4)_3$. <i>Solid State Ionics</i> , 1998, 112, 309-318.	1.3	29
97	Relationship between Activation Energy and Bottleneck Size for Li-Ion Conduction in NASICON Materials of Composition $\text{LiM}(\text{PO}_4)_3$; M = Ge, Ti, Sn, Hf. <i>Journal of Physical Chemistry B</i> , 1998, 102, 372-375.	1.2	173
98	Vibrational spectroscopy of single crystals. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 7501-7510.	0.7	37
99	Optical constants of tetragonal and cubic zirconias in the infrared. <i>Journal of Applied Physics</i> , 1996, 80, 3479-3483.	1.1	82
100	Modeling Particle Size and Clumping Effects in the IR Absorbance Spectra of Dilute Powders. <i>Applied Spectroscopy</i> , 1996, 50, 1553-1562.	1.2	24
101	Neutron Scattering Evidence for Localized Soft Modes in Amorphous Polymers. <i>Physical Review Letters</i> , 1996, 77, 659-662.	2.9	65
102	The infrared dielectric properties of Al_2O_3 . <i>Journal of Materials Research</i> , 1996, 11, 127-133.	1.2	17
103	The infrared dielectric properties of maghemite, $\gamma\text{-Fe}_2\text{O}_3$, from reflectance measurement on pressed powders. <i>Physics and Chemistry of Minerals</i> , 1995, 22, 21.	0.3	156
104	Structural Characteristics of Uniform $\gamma\text{-Fe}_2\text{O}_3$ Particles with Different Axial (Length/Width) Ratios. <i>Journal of Solid State Chemistry</i> , 1994, 108, 158-163.	1.4	98
105	Infrared optical properties of zircon. <i>Materials Research Bulletin</i> , 1994, 29, 417-426.	2.7	41
106	A method for the determination of infrared optical constants from reflectance measurements on powdered samples. <i>Journal of Physics Condensed Matter</i> , 1994, 6, 7125-7141.	0.7	35
107	Effective dielectric properties of packed mixtures of insulator particles. <i>Physical Review B</i> , 1994, 49, 7137-7147.	1.1	68
108	Average Dielectric Constant of Coated Spheres: Application to the IR Absorption Spectra of NiO and MgO. <i>Applied Spectroscopy</i> , 1993, 47, 1203-1208.	1.2	15