Luis F Vazquez

List of Publications by Year in Descending Order

260 papers	6,989 citations	44 h-index	69 g-index
267 ext. papers	7,472 ext. citations	5 avg, IF	5.43 L-index

#	Paper	IF	Citations
260	Role of the metal supply pathway on silicon patterning by oblique ion beam sputtering. *Applied Surface Science*, **2022**, 580, 152267	6.7	0
259	Lactate biosensing based on covalent immobilization of lactate oxidase onto chevron-like graphene nanoribbons via diazotization-coupling reaction.. *Analytica Chimica Acta*, **2022**, 1208, 339851	6.6	1
258	Metal-catalyst-free gas-phase synthesis of long-chain hydrocarbons. *Nature Communications*, **2021**, 12, 5937	17.4	2
257	Role of the interfaces in the crystallization and hysteresis mechanisms of amorphous Fe-B thin films. *Journal of Alloys and Compounds*, **2021**, 869, 159276	5.7	1
256	Modification of the Mechanical Properties of Core-Shell Liquid Gallium Nanoparticles by Thermal Oxidation at Low Temperature. *Particle and Particle Systems Characterization*, **2021**, 38, 2100141	3.1	0
255	A supramolecular hybrid sensor based on cucurbit[8]uril, 2D-molibdenum disulphide and diamond nanoparticles towards methyl viologen analysis. *Analytica Chimica Acta*, **2021**, 1182, 338940	6.6	2
254	Silicon and Hydrogen Chemistry under Laboratory Conditions Mimicking the Atmosphere of Evolved Stars. *Astrophysical Journal*, **2021**, 906,	4.7	1
253	Evaluation of oxidative stress: Nanoparticle-based electrochemical sensors for hydrogen peroxide determination in human semen samples. *Bioelectrochemistry*, **2020**, 135, 107581	5.6	7
252	Ultrasound-assisted preparation of nanocomposites based on fibrous clay minerals and nanocellulose from microcrystalline cellulose. *Applied Clay Science*, **2020**, 189, 105538	5.2	8
251	Plasmonic coupling in closed-packed ordered gallium nanoparticles. *Scientific Reports*, **2020**, 10, 4187	4.9	11
250	Near infrared-light responsive WS microengines with high-performance electro- and photo-catalytic activities. *Chemical Science*, **2020**, 11, 132-140	9.4	10
249	Highly ordered silicide ripple patterns induced by medium-energy ion irradiation. *Physical Review B*, **2020**, 102,	3.3	3
248	Sensor based on diamond nanoparticles and WS2 for ponceau 4R and tartrazine determination: Influence of green solvents employed for WS2 exfoliation. *FlatChem*, **2020**, 23, 100185	5.1	6
247	A 2D tungsten disulphide/diamond nanoparticles hybrid for an electrochemical sensor development towards the simultaneous determination of sunset yellow and quinoline yellow. *Sensors and Actuators B: Chemical*, **2020**, 324, 128731	8.5	6
246	Chemically synthesized chevron-like graphene nanoribbons for electrochemical sensors development: determination of epinephrine. *Scientific Reports*, **2020**, 10, 14614	4.9	18
245	Modelling of Optical Damage in Nanorippled ZnO Produced by Ion Irradiation. *Crystals*, **2019**, 9, 453	2.3	2
244	Direct visualization of the native structure of viroid RNAs at single-molecule resolution by atomic force microscopy. *RNA Biology*, **2019**, 16, 295-308	4.8	10

243	Versatile Graphene-Based Platform for Robust Nanobiohybrid Interfaces. *ACS Omega*, **2019**, 4, 3287-3297	3.9	4
242	Magnetic Fields Enhanced the Performance of Tubular Dichalcogenide Micromotors at Low Hydrogen Peroxide Levels. *Chemistry - A European Journal*, **2019**, 25, 13157-13163	4.8	12
241	Ultra-thin NaCl films as protective layers for graphene. *Nanoscale*, **2019**, 11, 16767-16772	7.7	3
240	Epitaxial n++-InGaAs ultra-shallow junctions for highly scaled n-MOS devices. *Applied Surface Science*, **2019**, 496, 143721	6.7	1
239	Differential pulse voltammetric determination of the carcinogenic diamine 4,4Roxydianiline by electrochemical preconcentration on a MoS based sensor. *Mikrochimica Acta*, **2019**, 186, 793	5.8	4
238	Morphology Clustering Software for AFM Images, Based on Particle Isolation and Artificial Neural Networks. *IEEE Access*, **2019**, 1-1	3.5	1
237	Growth of nanocolumnar thin films on patterned substrates at oblique angles. *Plasma Processes and Polymers*, **2019**, 16, 1800135	3.4	8
236	MoS2 nanosheets for improving analytical performance of lactate biosensors. *Sensors and Actuators B: Chemical*, **2018**, 274, 310-317	8.5	29
235	Nonuniversality of front fluctuations for compact colonies of nonmotile bacteria. *Physical Review E*, **2018**, 98, 012407	2.4	6
234	Concurrent segregation and erosion effects in medium-energy iron beam patterning of silicon surfaces. *Journal of Physics Condensed Matter*, **2018**, 30, 274001	1.8	5
233	Size-selective breaking of the core-shell structure of gallium nanoparticles. *Nanotechnology*, **2018**, 29, 355707	3.4	12
232	Special issue on surfaces patterned by ion sputtering. *Journal of Physics Condensed Matter*, **2018**, 30, 450301	1.8	1
231	Enzymatic Sol-Gel Biosensors **2018**, 3705-3743		
230	Synergistic effect of MoS and diamond nanoparticles in electrochemical sensors: determination of the anticonvulsant drug valproic acid. *Mikrochimica Acta*, **2018**, 185, 334	5.8	11
229	Press-transferred carbon black nanoparticles for class-selective antioxidant electrochemical detection. *Applied Materials Today*, **2017**, 9, 29-36	6.6	29
228	Zinc nitride thin films: basic properties and applications **2017**,		4
227	Collective evolution of submicron hillocks during the early stages of anisotropic alkaline wet chemical etching of Si(1 0 0) surfaces. *Journal Physics D: Applied Physics*, **2017**, 50, 435306	3	6
226	Morphological stabilization and KPZ scaling by electrochemically induced co-deposition of nanostructured NiW alloy films. *Scientific Reports*, **2017**, 7, 17997	4.9	13

225	High Ultraviolet Absorption in Colloidal Gallium Nanoparticles Prepared from Thermal Evaporation. *Nanomaterials*, **2017**, 7,	5.4	12
224	Self-organised silicide nanodot patterning by medium-energy ion beam sputtering of Si(100): local correlation between the morphology and metal content. *Nanotechnology*, **2016**, 27, 444001	3.4	10
223	Electrocatalytic processes promoted by diamond nanoparticles in enzymatic biosensing devices. *Bioelectrochemistry*, **2016**, 111, 93-9	5.6	10
222	Diamond nanoparticles as a way to improve electron transfer in sol-gel L-lactate biosensing platforms. *Analytica Chimica Acta*, **2016**, 908, 141-9	6.6	22
221	Enzymatic Sol□el Biosensors **2016**, 1-39		
220	Carbon Allotrope Nanomaterials Based Catalytic Micromotors. *Chemistry of Materials*, **2016**, 28, 8962-8970	9.6	65
219	Analysis of Zinc Nitride Resistive Indicators under Different Relative Humidity Conditions. *ACS Applied Materials & Interfaces*, **2016**, 8, 29163-29168	9.5	12
218	Mapping nanometric electronic property changes induced by an aryl diazonium sub-monolayer on HOPG. *Physical Chemistry Chemical Physics*, **2016**, 18, 29218-29225	3.6	11
217	Force spectroscopy predicts thermal stability of immobilized proteins by measuring microbead mechanics. *Soft Matter*, **2016**, 12, 8718-8725	3.6	6
216	Press-Printed Conductive Carbon Black Nanoparticle Films for Molecular Detection at the Microscale. *Chemistry - A European Journal*, **2016**, 22, 12761-6	4.8	31
215	Carbon nanomaterial scaffold films with conductivity at micro and sub-micron levels. *Journal of Materials Chemistry A*, **2016**, 4, 13142-13147	13	18
214	Self-consistent depth profiling and imaging of GaN-based transistors using ion microbeams. *Nuclear Instruments & Methods in Physics Research B*, **2015**, 348, 246-250	1.2	2
213	Effect of the low magnetic field on the electrodeposition of CoxNi100□ alloys. *Materials Characterization*, **2015**, 105, 136-143	3.9	18
212	Nonuniversality due to inhomogeneous stress in semiconductor surface nanopatterning by low-energy ion-beam irradiation. *Physical Review B*, **2015**, 91,	3.3	36
211	Nanomechanical characterization of nanostructured bainitic steel: Peak Force Microscopy and Nanoindentation with AFM. *Scientific Reports*, **2015**, 5, 17164	4.9	48
210	Ion damage overrides structural disorder in silicon surface nanopatterning by low-energy ion beam sputtering. *Europhysics Letters*, **2015**, 109, 48003	1.6	11
209	A magnesium-induced RNA conformational switch at the internal ribosome entry site of hepatitis C virus genome visualized by atomic force microscopy. *Nucleic Acids Research*, **2015**, 43, 565-80	20.1	20
208	Diamond nanoparticles based biosensors for efficient glucose and lactate determination. *Biosensors and Bioelectronics*, **2015**, 68, 521-528	11.8	43

207	Elastic properties of natural single nanofibres. *RSC Advances*, **2014**, 4, 11225	3.7	9
206	Controlled chemistry of tailored graphene nanoribbons for electrochemistry: a rational approach to optimizing molecule detection. *RSC Advances*, **2014**, 4, 132-139	3.7	71
205	Nucleation kinetics of SrTiO3 3D islands and nanorings on Si substrates. *Nanoscale*, **2014**, 6, 13188-95	7.7	
204	Influence of lateral and in-depth metal segregation on the patterning of ohmic contacts for GaN-based devices. *Journal Physics D: Applied Physics*, **2014**, 47, 185302	3	2
203	Influence of metal co-deposition on silicon nanodot patterning dynamics during ion-beam sputtering. *Nanotechnology*, **2014**, 25, 415301	3.4	10
202	Self-organized nanopatterning of silicon surfaces by ion beam sputtering. *Materials Science and Engineering Reports*, **2014**, 86, 1-44	30.9	112
201	Dynamics of GDOES-induced surface roughening in metal interfaces. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 7483-95	4.4	5
200	Pattern-wavelength coarsening from topological dynamics in silicon nanofoams. *Physical Review Letters*, **2014**, 112, 094103	7.4	15
199	Lactate biosensor based on a bionanocomposite composed of titanium oxide nanoparticles, photocatalytically reduced graphene, and lactate oxidase. *Mikrochimica Acta*, **2014**, 181, 79-87	5.8	29
198	Sol□el derived gold nanoparticles biosensing platform for Escherichia coli detection. *Sensors and Actuators B: Chemical*, **2013**, 182, 307-314	8.5	7
197	Surface and sub-surface degradation of unidirectional carbon fiber reinforced epoxy composites under dry and wet reciprocating sliding. *Composites Part A: Applied Science and Manufacturing*, **2013** , 55, 53-62	8.4	16
196	X-ray absorption near-edge structure of hexagonal ternary phases in sputter-deposited TiAlN films. *Journal of Alloys and Compounds*, **2013**, 561, 87-94	5.7	23
195	Laccase biosensors based on different enzyme immobilization strategies for phenolic compounds determination. *Talanta*, **2013**, 115, 401-8	6.2	40
194	Atomistic model of ultra-smooth amorphous thin film growth by low-energy ion-assisted physical vapour deposition. *Journal Physics D: Applied Physics*, **2013**, 46, 395303	3	5
193	Comparative Response of Biosensing Platforms Based on Synthesized Graphene Oxide and Electrochemically Reduced Graphene. *Electroanalysis*, **2013**, 25, 154-165	3	39
192	Mass transfer to a nanostructured nickel electrodeposit of high surface area in a rectangular flow channel. *Electrochimica Acta*, **2013**, 90, 507-513	6.7	30
191	Metallic Seed Nanolayers for Enhanced Nucleation of Nanocrystalline Diamond Thin Films. *Journal of Physical Chemistry C*, **2013**, 117, 23322-23332	3.8	20
190	Self-organized surface nanopatterns on Cd(Zn)Te crystals induced by medium-energy ion beam sputtering. *Journal Physics D: Applied Physics*, **2013**, 46, 455302	3	7

189	Phase-field model for the morphology of monolayer lipid domains. *European Physical Journal E*, **2012**, 35, 49	1.5	9
188	Adhesin contribution to nanomechanical properties of the virulent Bordetella pertussis envelope. *Langmuir*, **2012**, 28, 7461-9	4	17
187	Thermal decomposition and fractal properties of sputter-deposited platinum oxide thin films. *Journal of Materials Research*, **2012**, 27, 829-836	2.5	9
186	Interfacial behavior and structural properties of a clinical lung surfactant from porcine source. *Biochimica Et Biophysica Acta - Biomembranes*, **2012**, 1818, 2756-66	3.8	22
185	Universality of cauliflower-like fronts: from nanoscale thin films to macroscopic plants. *New Journal of Physics*, **2012**, 14, 103039	2.9	23
184	Thermal stability of HfO2-on-GaAs nanopatterns. *Nanoscale*, **2012**, 4, 3734-8	7.7	5
183	Stress-induced solid flow drives surface nanopatterning of silicon by ion-beam irradiation. *Physical Review B*, **2012**, 86,	3.3	83
182	Independence of interrupted coarsening on initial system order: ion-beam nanopatterning of amorphous versus crystalline silicon targets. *Journal of Physics Condensed Matter*, **2012**, 24, 375302	1.8	20
181	Nanopatterning dynamics on Si(100) during oblique 40-keV Ar+ erosion with metal codeposition: Morphological and compositional correlation. *Physical Review B*, **2012**, 86,	3.3	32
180	Strong anisotropy in surface kinetic roughening: Analysis and experiments. *Physical Review B*, **2012**, 86,	3.3	16
179	Growth Dynamics of Nanocrystalline Diamond Thin Films Deposited by Hot Filament Chemical Vapor Deposition: Influence of Low Sticking and Renucleation Processes. *Journal of Physical Chemistry C*, **2011**, 115, 9681-9691	3.8	16
178	New nanostructured electrochemical biosensors based on three-dimensional (3-mercaptopropyl)-trimethoxysilane network. *Analyst, The*, **2011**, 136, 340-7	5	35
177	Fabrication of HfO2 patterns by laser interference nanolithography and selective dry etching for III-V CMOS application. *Nanoscale Research Letters*, **2011**, 6, 400	5	12
176	Annealing of heterogeneous phase TiO2 films: An X-ray absorption and morphological study. *Chemical Physics Letters*, **2011**, 511, 367-371	2.5	11
175	Surface study of the building steps of enzymatic sol-gel biosensors at the micro- and nano-scales. *Journal of Sol-Gel Science and Technology*, **2011**, 58, 452-462	2.3	11
174	Carbon nanotubes/pentacyaneferrate-modified chitosan nanocomposites platforms for reagentless glucose biosensing. *Analytical and Bioanalytical Chemistry*, **2011**, 401, 883-9	4.4	13
173	Nanoscale pattern formation at surfaces under ion-beam sputtering: A perspective from continuum models. *Nuclear Instruments & Methods in Physics Research B*, **2011**, 269, 894-900	1.2	47
172	Ultrasmooth growth of amorphous silicon films through ion-induced long-range surface correlations. *Applied Physics Letters*, **2011**, 98, 011904	3.4	12

171	Ionic conductivity of nanocrystalline yttria-stabilized zirconia: Grain boundary and size effects. *Physical Review B*, **2010**, 81,	3.3	69
170	Molybdenum interlayers for nucleation enhancement in diamond CVD growth. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 2885-91	1.3	7
169	Depressed thermal conductivity of mechanically alloyed nanocrystalline 10 mol% yttria-stabilized zirconia. *Journal Physics D: Applied Physics*, **2010**, 43, 105407	3	8
168	Enhancement of the nucleation of smooth and dense nanocrystalline diamond films by using molybdenum seed layers. *Journal of Applied Physics*, **2010**, 108, 103514	2.5	35
167	AFM, SECM and QCM as useful analytical tools in the characterization of enzyme-based bioanalytical platforms. *Analyst, The*, **2010**, 135, 1878-903	5	37
166	Observation and modeling of interrupted pattern coarsening: surface nanostructuring by ion erosion. *Physical Review Letters*, **2010**, 104, 026101	7.4	51
165	Tribological study of hydrogenated amorphous carbon films with tailored microstructure and composition produced by bias-enhanced plasma chemical vapour deposition. *Diamond and Related Materials*, **2010**, 19, 1093-1102	3.5	34
164	One-step covalent microcontact printing approach to produce patterns of lactate oxidase. *Physical Chemistry Chemical Physics*, **2010**, 12, 2830-7	3.6	6
163	Influence of the surface morphology and microstructure on the biological properties of TiSiCN coatings. *Thin Solid Films*, **2010**, 518, 5694-5699	2.2	11
162	Surface Morphology of Heterogeneous Nanocrystalline Rutile/Amorphous Anatase TiO2 Films Grown by Reactive Pulsed Magnetron Sputtering. *Plasma Processes and Polymers*, **2010**, 7, 813-823	3.4	15
161	Chemical and physical sputtering effects on the surface morphology of carbon films grown by plasma chemical vapor deposition. *Journal of Applied Physics*, **2009**, 106, 033504	2.5	10
160	Morphological investigation of Mn12 single-molecule magnets adsorbed on Au(111). *Langmuir*, **2009**, 25, 10107-15	4	9
159	Gold nanoparticles-induced enhancement of the analytical response of an electrochemical biosensor based on an organic-inorganic hybrid composite material. *Talanta*, **2009**, 80, 797-802	6.2	32
158	Self-Organized Surface Nanopatterning by Ion Beam Sputtering **2009**, 323-398		32
157	Production of nanohole/nanodot patterns on Si(001) by ion beam sputtering with simultaneous metal incorporation. *Journal of Physics Condensed Matter*, **2009**, 21, 224009	1.8	26
156	Substrate pre-treatment by ultrasonication with diamond powder mixtures for nucleation enhancement in diamond film growth. *Diamond and Related Materials*, **2009**, 18, 1239-1246	3.5	38
155	Surface nanopatterns induced by ion-beam sputtering. *Journal of Physics Condensed Matter*, **2009**, 21, 220301	1.8	25
154	Tuning the surface morphology in self-organized ion beam nanopatterning of Si(001) via metal incorporation: from holes to dots. *Nanotechnology*, **2008**, 19, 355306	3.4	56

153	Surface morphology stabilization by chemical sputtering in carbon nitride film growth. *Journal Physics D: Applied Physics*, **2008**, 41, 012006	3	3
152	Architectures based on the use of gold nanoparticles and ruthenium complexes as a new route to improve genosensor sensitivity. *Biosensors and Bioelectronics*, **2008**, 24, 184-90	11.8	26
151	Nanomechanical properties of globular proteins: lactate oxidase. *Langmuir*, **2007**, 23, 2747-54	4	35
150	Generic equations for pattern formation in evolving interfaces. *New Journal of Physics*, **2007**, 9, 102-102	2.9	15
149	Hybrid titania-aminosilane platforms evaluated with human mesenchymal stem cells. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2007**, 83, 232-9	3.5	7
148	Influence of external bias on the surface morphology of a-C:H films grown by electron cyclotron resonance chemical vapor deposition. *Surface and Coatings Technology*, **2007**, 201, 8950-8954	4.4	11
147	DC substrate bias effects on the physical properties of hydrogenated amorphous carbon films grown by plasma-assisted chemical vapour deposition. *Vacuum*, **2007**, 81, 1412-1415	3.7	23
146	Universal non-equilibrium phenomena at submicrometric surfaces and interfaces. *European Physical Journal: Special Topics*, **2007**, 146, 427-441	2.3	25
145	Bioanalytical device based on cholesterol oxidase-bonded SAM-modified electrodes. *Analytical and Bioanalytical Chemistry*, **2007**, 388, 1059-67	4.4	14
144	Cholesterol oxidase modified gold electrodes as bioanalytical devices. *Sensors and Actuators B: Chemical*, **2007**, 124, 30-37	8.5	28
143	In situ x-ray scattering study of self-organized nanodot pattern formation on GaSb(001) by ion beam sputtering. *Applied Physics Letters*, **2007**, 91, 113105	3.4	25
142	Effect of elevated substrate temperature on growth, properties, and structure of indium tin oxide films prepared by reactive magnetron sputtering. *Journal of Materials Research*, **2007**, 22, 2319-2329	2.5	7
141	Interplay between Morphology and Surface Transport in Nanopatterns Produced by Ion-Beam Sputtering. *Materials Research Society Symposia Proceedings*, **2007**, 1059, 1		1
140	Novel magnetic organic□horganic nanostructured materials. *Journal of Materials Chemistry*, **2007**, 17, 4233		20
139	A complementary microscopy analysis of Sticholysin II crystals on lipid films: Atomic force and transmission electron characterizations. *Biophysical Chemistry*, **2006**, 119, 219-23	3.5	22
138	Intrinsic anomalous surface roughening of TiN films deposited by reactive sputtering. *Physical Review B*, **2006**, 73,	3.3	52
137	Secondary electron emission and photoemission studies on surface films of carbon nitride. *Journal of Applied Physics*, **2006**, 99, 043513	2.5	14
136	Growth dynamics of ultrasmooth hydrogenated amorphous carbon films. *Physical Review B*, **2006**, 74,	3.3	26

135	Temperature influence on the production of nanodot patterns by ion beam sputtering of Si(001). *Physical Review B*, **2006**, 73,	3.3	61
134	Order enhancement and coarsening of self-organized silicon nanodot patterns induced by ion-beam sputtering. *Applied Physics Letters*, **2006**, 89, 233101	3.4	49
133	Microscopic and voltammetric characterization of bioanalytical platforms based on lactate oxidase. *Langmuir*, **2006**, 22, 5443-50	4	23
132	Comprehensive study of bioanalytical platforms: xanthine oxidase. *Analytical Chemistry*, **2006**, 78, 530-7	7.8	20
131	Design and characterization of a lactate biosensor based on immobilized lactate oxidase onto gold surfaces. *Analytica Chimica Acta*, **2006**, 555, 308-315	6.6	101
130	Morphology of ion tracks and nanopores in LiNbO3 produced by swift-ion-beam irradiation. *Nuclear Instruments & Methods in Physics Research B*, **2006**, 249, 172-176	1.2	13
129	Gelation under dynamic conditions: a strategy for in vitro cell ordering. *Journal of Materials Science: Materials in Medicine*, **2006**, 17, 795-802	4.5	2
128	Self-organized ordering of nanostructures produced by ion-beam sputtering. *Physical Review Letters*, **2005**, 94, 016102	7.4	194
127	Influence of a fluorescent probe on the nanostructure of phospholipid membranes: dipalmitoylphosphatidylcholine interfacial monolayers. *Langmuir*, **2005**, 21, 5349-55	4	61
126	Growth dynamics of reactive-sputtering-deposited AlN films. *Journal of Applied Physics*, **2005**, 97, 123528	2.5	35
125	Self-doped titanium oxide thin films for efficient visible light photocatalysis: An example: Nonylphenol photodegradation. *Sensors and Actuators B: Chemical*, **2005**, 109, 52-56	8.5	31
124	In situ conformational analysis of fibrinogen adsorbed on Si surfaces. *Colloids and Surfaces B: Biointerfaces*, **2005**, 42, 219-25	6	113
123	Surface-relief micropatterning of zinc oxide substrates by micromolding pulsed-laser-deposited films. *Applied Physics A: Materials Science and Processing*, **2005**, 81, 1113-1116	2.6	6
122	Molding and replication of ceramic surfaces with nanoscale resolution. *Small*, **2005**, 1, 300-9	11	24
121	Surface nanopatterning of metal thin films by physical vapour deposition onto surface-modified silicon nanodots. *Nanotechnology*, **2004**, 15, S197-S200	3.4	18
120	Direct Nanopatterning of Metal Surfaces Using Self-Assembled Molecular Films. *Advanced Materials* , **2004**, 16, 405-409	24	40
119	Structure and morphology evolution of ALN films grown by DC sputtering. *Surface and Coatings Technology*, **2004**, 180-181, 140-144	4.4	40
118	Influence of the Nanostructure of Palladium Mesoparticles on the Kinetics of Molecular Oxygen Electroreduction. *Journal of Physical Chemistry B*, **2004**, 108, 10785-10795	3.4	18

117	Effect of pulmonary surfactant protein SP-B on the micro- and nanostructure of phospholipid films. *Biophysical Journal*, **2004**, 86, 308-20	2.9	76
116	Surface and interface analysis of hydroxyapatite/TiO2 biocompatible structures. *Materials Science and Engineering C*, **2003**, 23, 451-454	8.3	19
115	Photoluminescence and AFM characterisation of the initial stages of porous silicon stain etching. *Physica Status Solidi A*, **2003**, 197, 409-413		8
114	Modeling heterogeneity and memory effects on the kinetic roughening of silica films grown by chemical vapor deposition. *Physical Review B*, **2003**, 67,	3.3	8
113	Direct molding of nanopatterned polymeric films: Resolution and errors. *Applied Physics Letters*, **2003**, 82, 457-459	3.4	11
112	AFM and TEM study of the lateral composition modulation in etched and photo etched InxGa1□P epitaxial layers. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 91-92, 269-273	3.1	3
111	Biological evaluation of aerosol-gel-derived hydroxyapatite coatings with human mesenchymal stem cells. *Biomaterials*, **2002**, 23, 3985-90	15.6	27
110	Effects of epitaxial strain on the growth mechanism in YBa2Cu3O7□ thin films in YBa2Cu3O7□/PrBa2Cu3O7 superlattices. *Physical Review B*, **2002**, 66,	3.3	15
109	Thiol-Functionalized Gold Surfaces as a Strategy to Induce Order in Membrane-Bound Enzyme Immobilization. *Nano Letters*, **2002**, 2, 577-582	11.5	20
108	Immobilization of Metallothionein on Gold/Mica Surfaces: Relationship between Surface Morphology and Protein□Substrate Interaction. *Langmuir*, **2002**, 18, 5909-5920	4	21
107	Nanopatterning of silicon surfaces by low-energy ion-beam sputtering: dependence on the angle of ion incidence. *Nanotechnology*, **2002**, 13, 304-308	3.4	53
106	Immobilization of peroxidase glycoprotein on gold electrodes modified with mixed epoxy-boronic Acid monolayers. *Journal of the American Chemical Society*, **2002**, 124, 12845-53	16.4	103
105	Morphological, optical and electrical characterization of antireflective porous silicon coatings for solar cells. *Optical Materials*, **2001**, 17, 75-78	3.3	27
104	Antireflective porous-silicon coatings for multicrystalline solar cells: the effects of chemical etching and rapid thermal processing. *Semiconductor Science and Technology*, **2001**, 16, 657-661	1.8	23
103	Growth evolution of ZnO films deposited by pulsed laser ablation. *Journal of Physics Condensed Matter*, **2001**, 13, L663-L672	1.8	30
102	Submicron structure and acoustic properties of ZnO films deposited on (100) InP by pulsed laser deposition. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2001**, 19, 224		24
101	Integration of piezoelectric (Pb, La)TiO3 on (100)InP by using a CeO2 buffer layer. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2001**, 19, 812		2
100	Defect characterization of silver-based low-emissivity multilayer coatings for energy-saving applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 2315-2319	2.9	3

99	Production of ordered silicon nanocrystals by low-energy ion sputtering. *Applied Physics Letters*, **2001**, 78, 3316-3318	3.4	217
98	Sulfur Substrate Interactions in Spontaneously Formed Sulfur Adlayers on Au(111). *Langmuir*, **2001**, 17, 4919-4924	4	99
97	Morphological and Structural Aspects of Thin Films Prepared by Vapor Deposition **2001**, 229-280		1
96	Epitaxial growth of Y-stabilised zirconia films on (100)InP substrates by pulsed laser deposition. *Journal of Crystal Growth*, **2000**, 209, 883-889	1.6	17
95	Intergranular Coulomb barriers in thin films of magnetoresistive manganites. *Thin Solid Films*, **2000**, 373, 94-97	2.2	1
94	Coulomb blockade versus intergrain resistance in colossal magnetoresistive manganite granular films. *Physical Review B*, **2000**, 61, 9549-9552	3.3	75
93	Dynamics of rough interfaces in chemical vapor deposition: experiments and a model for silica films. *Physical Review Letters*, **2000**, 84, 3125-8	7.4	69
92	Model of the bias-enhanced nucleation of diamond on silicon based on atomic force microscopy and x-ray-absorption studies. *Physical Review B*, **2000**, 61, 10383-10387	3.3	14
91	Modulation of Electroenzymatic NADPH Oxidation through Oriented Immobilization of Ferredoxin:NADP+ Reductase onto Modified Gold Electrodes. *Journal of the American Chemical Society*, **2000**, 122, 9808-9817	16.4	56
90	Influence of Deposit Thickness on the Microstructure and Surface Roughness of Silicon Films Deposited from Silane. *Solid State Phenomena*, **1999**, 67-68, 125-130	0.4	4
89	Hysteresis and Interactions in Nanoparticulate Fe Films. *Materials Science Forum*, **1999**, 302-303, 96-100	0.4	
88	Three-dimensional off-lattice model for the interface growth of polycrystalline materials. *Physical Review B*, **1999**, 59, 7354-7357	3.3	22
87	Piezoelectric Pb0.7La0.2TiO3 prepared by pulsed laser deposition on (100)InP. *Applied Physics A: Materials Science and Processing*, **1999**, 69, S827-S831	2.6	7
86	Magnetic viscosity of granular Fe films prepared by laser ablation. *Journal of Magnetism and Magnetic Materials*, **1999**, 196-197, 96-98	2.8	4
85	La?Ca?Mn?O manganites thin films on silicon. *Journal of Magnetism and Magnetic Materials*, **1999**, 196-197, 530-531	2.8	10
84	Study of the growth mechanisms of low-pressure chemically vapour deposited silica films. *European Physical Journal Special Topics*, **1999**, 09, Pr8-265-Pr8-271		2
83	Scanning Tunneling Microscopy: Applications to the Study of Ordered and Disordered Conducting Solid Surfaces **1999**, 17-40		
82	Atmospheric pressure MOCVD growth of crystalline InP in opals. *Journal of Crystal Growth*, **1998**, 193, 9-15	1.6	19

81	Surface Morphology Evolution of Chemical Vapor-Deposited Tungsten Films on Si(100). *Chemical Vapor Deposition*, **1998**, 04, 89-91		3
80	Silver-based low-emissivity coatings for architectural windows: Optical and structural properties. *Solar Energy Materials and Solar Cells*, **1998**, 53, 55-66	6.4	54
79	Relationship between the microstructure and the water permeability of transparent gas barrier coatings. *Surface and Coatings Technology*, **1998**, 100-101, 459-462	4.4	7
78	Dynamic Scaling Exponents of Copper Electrodeposits from Scanning Force Microscopy Imaging. Influence of a Thiourea Additive on the Kinetics of Roughening and Brightening. *Langmuir*, **1998**, 14, 2515-2524	4	52
77	X-ray absorption spectroscopy and atomic force microscopy study of bias-enhanced nucleation of diamond films. *Applied Physics Letters*, **1998**, 72, 2105-2107	3.4	40
76	Influence of nitrogen implantation on the properties of Ti and substoichiometric TiNx films deposited on high speed steel. *Journal of Materials Research*, **1998**, 13, 2117-2122	2.5	6
75	Highly homogeneous nanoparticulate Fe films prepared by laser ablation. *IEEE Transactions on Magnetics*, **1998**, 34, 1108-1110	2	3
74	Validity of the Linear Growth Equation for Interface Evolution for Copper Electrodeposition in the Presence of Organic Additives. *Physical Review Letters*, **1997**, 79, 709-712	7.4	51
73	Influence of the Adsorbate Structure and Surface Barrier at Micropores. The Adsorption on Columnar-Structured Gold Electrodes of Pyridine from Aqueous Perchlorate Ion-Containing Solutions. *Langmuir*, **1997**, 13, 1317-1326	4	10
72	Photonic crystal properties of packed submicrometric SiO2 spheres. *Applied Physics Letters*, **1997**, 71, 1148-1150	3.4	294
71	Chemical and Morphological Changes of the Pyrite Induced by Leaching and Bioleaching Processes in the Presence of Catalytic Ag Ions. *Langmuir*, **1997**, 13, 3355-3363	4	6
70	Evidence of FCC Crystallization of SiO2 Nanospheres. *Langmuir*, **1997**, 13, 6009-6011	4	259
69	Optical and structural characterization of r.f. sputtered CeO2 thin films. *Journal of Materials Science* , **1997**, 32, 1861-1865	4.3	45
68	Influence of the initial nitrogen content in titanium films on the nitridation and silicidation processes. *Thin Solid Films*, **1997**, 305, 185-190	2.2	
67	3D Long-range ordering in ein SiO2 submicrometer-sphere sintered superstructure. *Advanced Materials*, **1997**, 9, 257-260	24	306
66	Effect of surface fractality on the permeability of transparent gas barrier coatings. *Advanced Materials*, **1997**, 9, 654-658	24	17
65	Photonic crystal made by close packing SiO2submicron spheres. *Superlattices and Microstructures*, **1997**, 22, 399-404	2.8	67
64	Kinetics and Mechanism of ⊞Brass Dealloying in Aqueous 0.5 M Sodium Chloride Solution Derived from Combined Scanning Tunneling Microscopy and Electrochemical Data. *Langmuir*, **1996**, 12, 500-507	4	18

63	Differentiating inclusion complexes from host molecules by tapping-mode atomic force microscopy. *Biophysical Journal*, **1996**, 71, 86-90	2.9	11
62	Scanning Tunneling Microscopy Observation of Sulfur Electrodeposits on Graphite Single Crystals *Langmuir*, **1996**, 12, 2-11	4	15
61	Adsorption of 1,10-Phenanthroline in HClO4 Solutions on Columnar-Structured Gold Electrodes. The Excluded Volume Effect. *Langmuir*, **1996**, 12, 818-824	4	8
60	A Quantum Chemistry Approach to Possible Sulfur Adsorbate Structures on the Basal Plane of Graphite Clusters. *Langmuir*, **1996**, 12, 19-22	4	8
59	A Combined Scanning Tunneling Microscopy and Electrochemical Study of Nickel Electrodeposition on Brass. *Langmuir*, **1996**, 12, 1068-1077	4	8
58	Scale-dependent roughening kinetics in vapor deposited gold. *Surface Science*, **1996**, 345, 17-26	1.8	27
57	Decrease in the Roughness of Vapor-Deposited Gold Surfaces Induced by Surface Mobility *Langmuir*, **1996**, 12, 12-18	4	7
56	Roughening kinetics of chemical vapor deposited copper films on Si(100). *Applied Physics Letters*, **1996**, 68, 1285-1287	3.4	30
55	Structural configurations of thin dried polyaniline films on gold(111) from scanning tunneling microscopy. *Electrochimica Acta*, **1996**, 41, 1891-1903	6.7	12
54	Analytical applications of retinoid-cyclodextrin inclusion complexes. 1. Characterization of a retinal-beta-cyclodextrin complex. *Journal of Pharmaceutical and Biomedical Analysis*, **1996**, 14, 909-15	3.5	30
53	Nitridation of TiSi2 thin films by rapid thermal processing. *Surface and Coatings Technology*, **1996**, 80, 72-75	4.4	4
52	Atomic force microscopy (AFM) morphological surface characterization of transparent gas barrier coatings on plastic films. *Surface and Coatings Technology*, **1996**, 80, 203-206	4.4	39
51	Influence of Methane Concentration on the Nucleation and Growth Stages in Diamond Film Deposition. *Physica Status Solidi A*, **1996**, 154, 23-32		12
50	Edward-Wilkinson Behavior of Crystal Surfaces Grown By Sedimentation of SiO2 Nanospheres. *Physical Review Letters*, **1996**, 77, 4572-4575	7.4	54
49	Methods of fractal analysis applied to STM imaging. *Chaos, Solitons and Fractals*, **1995**, 6, 569-573	9.3	9
48	Dynamic-scaling exponents and the roughening kinetics of gold electrodeposits. *Physical Review B*, **1995**, 52, 2032-2037	3.3	16
47	A SIMPLE MODEL FOR ORIENTATIONAL ORDERING OF A SILVER MONOLAYER ELECTRODEPOSITED ON A C(0001) SURFACE. *Surface Review and Letters*, **1995**, 02, 489-494	1.1	2
46	AFM Observations of the Breakdown Damage in Anodic T2O5 Films. *Materials Science Forum*, **1995**, 185-188, 251-260	0.4	

45	Deposition of diamond and boron nitride films by plasma chemical vapour deposition. *Surface and Coatings Technology*, **1995**, 70, 163-174	4.4	10
44	Scanning Tunneling Microscopy Fractal Characterization of Poly(o-toluidine) Films Produced Electrochemically on Polyfaceted Gold Single Crystal Spheres. *The Journal of Physical Chemistry*, **1994**, 98, 2418-2425		37
43	Self-affine fractal electrodeposited gold surfaces: Characterization by scanning tunneling microscopy. *Physical Review E*, **1994**, 49, 1507-1511	2.4	33
42	Morphological model of the electrical anisotropy of a conducting polypyrrole. *Journal of Applied Physics*, **1994**, 75, 1849-1851	2.5	3
41	Fractal to nonfractal behavior of vapor-deposited gold surfaces and the relationship to the substrate temperature. *Physical Review E*, **1994**, 50, 1367-1371	2.4	23
40	Scanning tunneling microscopy morphological study of the first stages of growth of microwave chemical vapor deposited thin diamond films. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 1		21
39	Influence of oxygen on the deposition of diamond coatings by microwave plasma CVD. *Vacuum*, **1994**, 45, 1015-1016	3.7	4
38	STM nanometric study of the initial stages of diamond film growth: quantitative measurement of {111} and {100} surface roughness. *Diamond and Related Materials*, **1994**, 3, 715-719	3.5	4
37	Nucleation and initial stages of growth of diamond films on silicon. *Scripta Metallurgica Et Materialia*, **1994**, 31, 1103-1108		1
36	Scanning tunneling microscopy characterization of the morphology of Fe/C multilayers grown on silicon substrates. *Journal of Applied Physics*, **1994**, 75, 248-254	2.5	3
35	Early stages of platinum electrodeposition on highly oriented pyrolytic graphite: scanning tunneling microscopy imaging and reaction pathway. *The Journal of Physical Chemistry*, **1993**, 97, 5095-5102		57
34	STM study of fractal scaling in evaporated gold films. *Applied Surface Science*, **1993**, 70-71, 413-417	6.7	27
33	The role of slow surface-atom reordering processes in the underpotential deposition of metals. *Journal of Electroanalytical Chemistry*, **1993**, 357, 339-355	4.1	11
32	Self-Affine Fractal Vapour-Deposited Gold Surfaces Characterization by Scanning Tunnelling Microscopy. *Europhysics Letters*, **1992**, 20, 727-732	1.6	70
31	Scanning tunneling microscopy and scanning electron microscopy observations of the early stage of silver deposition on graphite single crystal electrodes. *The Journal of Physical Chemistry*, **1992**, 96, 10454-10460		28
30	Scanning tunneling characterization of the atomic and electronic structure of nanometer thick carbon films grown by pulsed laser vaporization of graphite. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1992**, 10, 566		3
29	Experimental study of Fe/C multilayer performance: effects of substrate quality and of x-ray irradiation **1992**,		1
28	Fractal surfaces of gold and platinum electrodeposits: dimensionality determination by scanning tunneling microscopy. *The Journal of Physical Chemistry*, **1992**, 96, 347-350		98

27	Scanning-tunneling-microscopy study on the growth mode of vapor-deposited gold films. *Physical Review A*, **1992**, 45, 7440-7447	2.6	45
26	Epitaxial growth of diamond-like films on Si(100) by pulsed-laser evaporation of graphite. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1992**, 11, 337-340	3.1	5
25	Scanning tunnelling microscopy studies of diamond-like films prepared by laser ablation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1992**, 11, 363-367	3.1	1
24	Scanning tunneling microscopy observation of the initial stages of growth of carbon films grown by pulsed laser vaporization of graphite. *Ultramicroscopy*, **1992**, 42-44, 616-623	3.1	7
23	A comparative study of electrodeposited and vapour deposited gold films: Fractal surface characterization through scanning tunnelling microscopy. *Electrochimica Acta*, **1992**, 37, 2209-2214	6.7	22
22	STM-SEM and impedance characterization of columnar structured gold electrodes. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1991**, 317, 125-137		17
21	Fractal characterisation of electrodispersed gold electrodes. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1991**, 319, 101-110		47
20	The early stages of growth of crystalline, diamond-like films on Si(100) by pulsed laser evaporation of graphite. *Surface Science*, **1991**, 251-252, 960-964	1.8	14
19	Application of an STM/SEM instrument for the study of materials: Tip effects and data correlation. *Surface and Interface Analysis*, **1990**, 16, 97-104	1.5	5
18	Epitaxial growth of crystalline, diamond-like films on Si (100) by laser ablation of graphite. *Applied Physics Letters*, **1990**, 57, 1742-1744	3.4	63
17	The Evaluation of Surface Diffusion Coefficients of Gold and Platinum Atoms at Electrochemical Interfaces from Combined STM-SEM Imaging and Electrochemical Techniques. *Journal of the Electrochemical Society*, **1990**, 137, 2161-2166	3.9	94
16	Writing nanometer-scale symbols in gold using the scanning tunneling microscope. *Applied Physics Letters*, **1989**, 54, 1424-1426	3.4	118
15	Scanning Tunnelling miroscopy and electrochemical response of electrofacetted gold electrodes. *Electrochimica Acta*, **1989**, 34, 619-624	6.7	13
14	Topographic imaging of GaAs-microstructured samples by STM and SEM. *Ultramicroscopy*, **1989**, 30, 355-358	3.1	5
13	A scanning tunnelling microscope study of groove structures in polycarbonate optical discs. *Journal of Materials Science*, **1989**, 24, 1739-1747	4.3	8
12	STM-SEM combination study on the electrochemical growth mechanism and structure of gold overlayers: A quantitative approach to electrochemical metal surface roughening. *Surface Science*, **1989**, 215, 171-189	1.8	49
11	Scanning tunneling microscopy (STM) and scanning electron microscopy (SEM) of electrodispersed gold electrodes. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1988**, 240, 77-87		19
10	Are the high Tc superconducting materials bulk superconductors or grain boundary percolating network superconductors? (abstract). *Journal of Applied Physics*, **1988**, 63, 4213-4213	2.5	20

9	Scanning tunneling microscopy topography of electron-beam evaporated niobium thin films in NbNbOxPb tunnel junctions on quartz substrates. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1988**, 6, 404-407	2.9	6
8	Combination of a scanning tunneling microscope with a scanning electron microscope. *Review of Scientific Instruments*, **1988**, 59, 1286-1289	1.7	35
7	Imaging an optical disc by the combined use of scanning tunnelling microscopy and scanning electron microscopy. *Journal of Microscopy*, **1988**, 152, 205-211	1.9	14
6	STM topography of niobium films in tunnel junctions. *Journal of Physics C: Solid State Physics*, **1987**, 20, L975-L978		4
5	Direct imaging of 13-diam Au clusters using scanning tunneling microscopy. *Applied Physics Letters*, **1987**, 51, 1594-1596	3.4	28
4	Scanning tunneling microscopy of platinum electrode surfaces with different preferred crystallographic orientations. *Surface Science*, **1987**, 181, 98-106	1.8	24
3	Scanning tunneling microscopy of electrochemically activated platinum surfaces. A direct ex-situ determination of the electrode nanotopography. *Journal of the American Chemical Society*, **1987**, 109, 1730-1733	16.4	50
2	Characterization of surface roughness in titanium dental implants measured with scanning tunnelling microscopy at atmospheric pressure. *Biomaterials*, **1986**, 7, 463-6	15.6	25
1	Surface topography of (100)-type electro-faceted platinum from scanning tunnelling microscopy and electrochemistry. *Nature*, **1986**, 323, 612-614	50.4	45