Abel Santos

List of Publications by Year in Descending Order

115 papers	3,274 citations	35 h-index	51 g-index
127 ext. papers	3,794 ext. citations	7 avg, IF	5.68 L-index

#	Paper	IF	Citations
115	Real-time detection of per-fluoroalkyl substance (PFAS) self-assembled monolayers in nanoporous interferometers. *Sensors and Actuators B: Chemical*, **2022**, 355, 131340	8.5	0
114	Role of Spectral Resonance Features and Surface Chemistry in the Optical Sensitivity of Light-Confining Nanoporous Photonic Crystals. *ACS Applied Materials & Interfaces*, **2021**, 13, 14394-14406	9.5	1
113	Optical engineering of nanoporous photonic crystals by Gaussian-Like pulse anodization. *Microporous and Mesoporous Materials*, **2021**, 312, 110770	5.3	2
112	Engineering of Broadband Nanoporous Semiconductor Photonic Crystals for Visible-Light-Driven Photocatalysis. *ACS Applied Materials & Interfaces*, **2020**, 12, 57079-57092	9.5	5
111	3D dose distribution measurement using 2D imaging from NaCl optical crystals. *Journal of Physics: Conference Series*, **2020**, 1662, 012009	0.3	
110	Tailor-engineered plasmonic single-lattices: harnessing localized surface plasmon resonances for visible-NIR light-enhanced photocatalysis. *Catalysis Science and Technology*, **2020**, 10, 3195-3211	5.5	3
109	Modulation of Macrophages Differentiation by Nanoscale-Engineered Geometric and Chemical Features.. *ACS Applied Bio Materials*, **2020**, 3, 1496-1505	4.1	3
108	Realization of high-quality optical nanoporous gradient-index filters by optimal combination of anodization conditions. *Nanoscale*, **2020**, 12, 9404-9415	7.7	6
107	Tailor-engineered structural and physico-chemical properties of anodic alumina nanotubes by pulse anodization: A step forward. *Microporous and Mesoporous Materials*, **2020**, 303, 110264	5.3	7
106	Tunable Nanoporous Anodic Alumina Photonic Crystals by Gaussian Pulse Anodization. *ACS Applied Materials & Interfaces*, **2020**, 12, 19778-19787	9.5	13
105	Developed Process Circuit Flowsheet of Al Amar Ore for Production of Nanocrystalline Ferrite and Improving Gold Recovery. *ACS Omega*, **2020**, 5, 30858-30870	3.9	1
104	Enhancing Forbidden Light Propagation in Nanoporous Anodic Alumina Gradient-Index Filters by Alcohol Additives. *ACS Applied Nano Materials*, **2020**, 3, 12115-12129	5.6	3
103	Electrochemically engineered nanoporous photonic crystal structures for optical sensing and biosensing **2020**, 201-226		3
102	Integrating surface plasmon resonance and slow photon effects in nanoporous anodic alumina photonic crystals for photocatalysis. *Catalysis Science and Technology*, **2019**, 9, 3158-3176	5.5	14
101	Environmental Copper Sensor Based on Polyethylenimine-Functionalized Nanoporous Anodic Alumina Interferometers. *Analytical Chemistry*, **2019**, 91, 5011-5020	7.8	32
100	Luminescent Porous Silicon Nanoparticles for Continuous Wave and Time-Gated Photoluminescence Imaging. *Methods in Molecular Biology*, **2019**, 2054, 185-198	1.4	
99	Light-confining semiconductor nanoporous anodic alumina optical microcavities for photocatalysis. *Journal of Materials Chemistry A*, **2019**, 7, 22514-22529	13	13

98	Nanoporous photonic crystals with tailored surface chemistry for ionic copper sensing. *Journal of Materials Chemistry C*, **2019**, 7, 12278-12289	7.1	9
97	Electrochemical Engineering of Nanoporous Materials for Photocatalysis: Fundamentals, Advances, and Perspectives. *Catalysts*, **2019**, 9, 988	4	9
96	Stacked Nanoporous Anodic Alumina Gradient-Index Filters with Tunable Multispectral Photonic Stopbands as Sensing Platforms. *ACS Applied Materials & Interfaces*, **2019**, 11, 3360-3371	9.5	26
95	Rational Management of Photons for Enhanced Photocatalysis in Structurally-Colored Nanoporous Anodic Alumina Photonic Crystals. *ACS Applied Energy Materials*, **2019**, 2, 1169-1184	6.1	15
94	On the Precise Tuning of Optical Filtering Features in Nanoporous Anodic Alumina Distributed Bragg Reflectors. *Scientific Reports*, **2018**, 8, 4642	4.9	25
93	Engineering of Hybrid Nanoporous Anodic Alumina Photonic Crystals by Heterogeneous Pulse Anodization. *Scientific Reports*, **2018**, 8, 9455	4.9	14
92	Real-Time Binding Monitoring between Human Blood Proteins and Heavy Metal Ions in Nanoporous Anodic Alumina Photonic Crystals. *Analytical Chemistry*, **2018**, 90, 10039-10048	7.8	19
91	Fabrication and Optimization of Bilayered Nanoporous Anodic Alumina Structures as Multi-Point Interferometric Sensing Platform. *Sensors*, **2018**, 18,	3.8	10
90	Porous Silicon Particles for Cancer Therapy and Bioimaging. *Nanomedicine and Nanotoxicology*, **2018**, 305-340	0.3	3
89	Fine tuning of transmission features in nanoporous anodic alumina distributed Bragg reflectors **2018**,		1
88	Nanoporous Anodic Alumina Photonic Crystals for Optical Chemo- and Biosensing: Fundamentals, Advances, and Perspectives. *Nanomaterials*, **2018**, 8,	5.4	33
87	Light-Confining Nanoporous Anodic Alumina Microcavities by Apodized Stepwise Pulse Anodization. *ACS Applied Nano Materials*, **2018**, 1, 4418-4434	5.6	14
86	Engineering the Slow Photon Effect in Photoactive Nanoporous Anodic Alumina Gradient-Index Filters for Photocatalysis. *ACS Applied Materials & Interfaces*, **2018**, 10, 24124-24136	9.5	21
85	Structural tailoring of nanoporous anodic alumina optical microcavities for enhanced resonant recirculation of light. *Nanoscale*, **2018**, 10, 14139-14152	7.7	19
84	Size- and shape-controlled synthesis of well-organised carbon nanotubes using nanoporous anodic alumina with different pore diameters. *Journal of Colloid and Interface Science*, **2017**, 491, 375-389	9.3	11
83	Nanoporous anodic alumina photonic crystals: fundamentals, developments and perspectives. *Journal of Materials Chemistry C*, **2017**, 5, 5581-5599	7.1	58
82	Engineering of Surface Chemistry for Enhanced Sensitivity in Nanoporous Interferometric Sensing Platforms. *ACS Applied Materials & Interfaces*, **2017**, 9, 8929-8940	9.5	24
81	Porous silicon for drug delivery applications and theranostics: recent advances, critical review and perspectives. *Expert Opinion on Drug Delivery*, **2017**, 14, 1407-1422	8	52

80	Multifunctional microspherical magnetic and pH responsive carriers for combination anticancer therapy engineered by droplet-based microfluidics. *Journal of Materials Chemistry B*, **2017**, 5, 4097-4109	7.3	29
79	Realisation and optical engineering of linear variable bandpass filters in nanoporous anodic alumina photonic crystals. *Nanoscale*, **2017**, 9, 7541-7550	7.7	15
78	In vivo toxicological assessment of electrochemically engineered anodic alumina nanotubes: a study of biodistribution, subcutaneous implantation and intravenous injection. *Journal of Materials Chemistry B*, **2017**, 5, 2511-2523	7.3	6
77	Highly biocompatible carbon nanocapsules derived from plastic waste for advanced cancer therapy. *Journal of Drug Delivery Science and Technology*, **2017**, 41, 351-358	4.5	9
76	Chemical Functionalization of Inner Walls of Carbon Nanotubes with Long-Chain Aliphatic Amines. *Nanoscience and Nanotechnology Letters*, **2017**, 9, 712-718	0.8	4
75	Carbon Nanotubes□Nanoporous Anodic Alumina Composite Membranes: Influence of Template on Structural, Chemical, and Transport Properties. *Journal of Physical Chemistry C*, **2017**, 121, 13634-13644	3.8	11
74	Realisation and advanced engineering of true optical rugate filters based on nanoporous anodic alumina by sinusoidal pulse anodisation. *Nanoscale*, **2016**, 8, 1360-73	7.7	42
73	Iron Oxide Nanowires from Bacteria Biofilm as an Efficient Visible-Light Magnetic Photocatalyst. *ACS Applied Materials & Interfaces*, **2016**, 8, 20110-9	9.5	27
72	Fine tuning of optical signals in nanoporous anodic alumina photonic crystals by apodized sinusoidal pulse anodisation. *Nanoscale*, **2016**, 8, 18360-18375	7.7	26
71	Structural Engineering of Nanoporous Anodic Alumina Photonic Crystals by Sawtooth-like Pulse Anodization. *ACS Applied Materials & Interfaces*, **2016**, 8, 13542-54	9.5	30
70	Fabrication and characterisation of sulfur and phosphorus (S/P) co-doped carbon nanotubes. *Chemical Physics Letters*, **2016**, 658, 92-96	2.5	7
69	Nanoporous hard data: optical encoding of information within nanoporous anodic alumina photonic crystals. *Nanoscale*, **2016**, 8, 8091-100	7.7	26
68	Influence of surface chemistry on the ionic conductivity of vertically aligned carbon nanotube composite membranes. *RSC Advances*, **2016**, 6, 44288-44296	3.7	1
67	Assessment of Binding Affinity between Drugs and Human Serum Albumin Using Nanoporous Anodic Alumina Photonic Crystals. *Analytical Chemistry*, **2016**, 88, 5971-80	7.8	19
66	From The Mine to Cancer Therapy: Natural and Biodegradable Theranostic Silicon Nanocarriers from Diatoms for Sustained Delivery of Chemotherapeutics. *Advanced Healthcare Materials*, **2016**, 5, 2667-2678	10.1	27
65	Facile and controllable route for nitrogen doping of carbon nanotubes composite membranes by catalyst-free chemical vapour deposition. *Carbon*, **2016**, 106, 295-305	10.4	8
64	Rational engineering of nanoporous anodic alumina optical bandpass filters. *Nanoscale*, **2016**, 8, 14846-57	7.7	24
63	Optimizing Anodization Conditions for the Growth of Titania Nanotubes on Curved Surfaces. *Journal of Physical Chemistry C*, **2015**, 119, 16033-16045	3.8	70

62	An overview of nanotoxicity and nanomedicine research: principles, progress and implications for cancer therapy. *Journal of Materials Chemistry B*, **2015**, 3, 7153-7172	7.3	89
61	Carbon nanotube-nanoporous anodic alumina composite membranes with controllable inner diameters and surface chemistry: Influence on molecular transport and chemical selectivity. *Carbon*, **2015**, 93, 681-692	10.4	29
60	Nanoporous Alumina. *Springer Series in Materials Science*, **2015**,	0.9	33
59	On The Generation of Interferometric Colors in High Purity and Technical Grade Aluminum: An Alternative Green Process for Metal Finishing Industry. *Electrochimica Acta*, **2015**, 174, 672-681	6.7	39
58	Facile synthesis of optical microcavities by a rationally designed anodization approach: tailoring photonic signals by nanopore structure. *ACS Applied Materials & Interfaces*, **2015**, 7, 9879-88	9.5	34
57	Advanced biopolymer-coated drug-releasing titania nanotubes (TNTs) implants with simultaneously enhanced osteoblast adhesion and antibacterial properties. *Colloids and Surfaces B: Biointerfaces*, **2015**, 130, 255-63	6	99
56	Membranes: Photoswitchable Membranes Based on Peptide-Modified Nanoporous Anodic Alumina: Toward Smart Membranes for On-Demand Molecular Transport (Adv. Mater. 19/2015). *Advanced Materials*, **2015**, 27, 2950-2950	24	
55	Systematic in vitro nanotoxicity study on anodic alumina nanotubes with engineered aspect ratio: understanding nanotoxicity by a nanomaterial model. *Biomaterials*, **2015**, 46, 117-30	15.6	40
54	Interferometric nanoporous anodic alumina photonic coatings for optical sensing. *Nanoscale*, **2015**, 7, 7770-9	7.7	41
53	Photoswitchable membranes based on peptide-modified nanoporous anodic alumina: toward smart membranes for on-demand molecular transport. *Advanced Materials*, **2015**, 27, 3019-24	24	34
52	Label-Free real-time quantification of enzyme levels by interferometric spectroscopy combined with gelatin-modified nanoporous anodic alumina photonic films. *Analytical Chemistry*, **2015**, 87, 9016-24	7.8	20
51	Localized drug delivery of selenium (Se) using nanoporous anodic aluminium oxide for bone implants. *Journal of Materials Chemistry B*, **2015**, 3, 7090-7098	7.3	18
50	Electrochemical Etching Methods for Producing Porous Silicon. *Springer Series in Materials Science*, **2015**, 1-36	0.9	7
49	Nanoporous Anodic Alumina for Optical Biosensing. *Springer Series in Materials Science*, **2015**, 219-247	0.9	4
48	Biomimetic Nanoporous Anodic Alumina Distributed Bragg Reflectors in the Form of Films and Microsized Particles for Sensing Applications. *ACS Applied Materials & Interfaces*, **2015**, 7, 19816-24	9.5	53
47	Nanoporous Alumina Membranes for Chromatography and Molecular Transporting. *Springer Series in Materials Science*, **2015**, 293-318	0.9	3
46	Nanoengineered drug-releasing aluminium wire implants: comparative investigation of nanopore geometry, drug release and osteoblast cell adhesion. *RSC Advances*, **2015**, 5, 75004-75014	3.7	4
45	Sensing and Biosensing Applications of Nanoporous Anodic Alumina. *Springer Series in Materials Science*, **2015**, 187-218	0.9	1

44	Bioinert Anodic Alumina Nanotubes for Targeting of Endoplasmic Reticulum Stress and Autophagic Signaling: A Combinatorial Nanotube-Based Drug Delivery System for Enhancing Cancer Therapy. *ACS Applied Materials & Interfaces*, **2015**, 7, 27140-51	9.5	23
43	Synthesis of Carbon Nanotube-Nanotubular Titania Composites by Catalyst-Free CVD Process: Insights into the Formation Mechanism and Photocatalytic Properties. *ACS Applied Materials & Interfaces*, **2015**, 7, 28361-8	9.5	19
42	Rational Design of Ultra-Short Anodic Alumina Nanotubes by Short-Time Pulse Anodization. *Electrochimica Acta*, **2015**, 154, 379-386	6.7	52
41	Microcarriers: Luminescent Silicon Diatom Replicas: Self-Reporting and Degradable Drug Carriers with Biologically Derived Shape for Sustained Delivery of Therapeutics (Adv. Funct. Mater. 32/2015). *Advanced Functional Materials*, **2015**, 25, 5240-5240	15.6	3
40	Rational Design of Photonic Dust from Nanoporous Anodic Alumina Films: A Versatile Photonic Nanotool for Visual Sensing. *Scientific Reports*, **2015**, 5, 12893	4.9	27
39	Luminescent Silicon Diatom Replicas: Self-Reporting and Degradable Drug Carriers with Biologically Derived Shape for Sustained Delivery of Therapeutics. *Advanced Functional Materials*, **2015**, 25, 5107-5116	15.6	29
38	Low-cost fabrication technologies for nanostructures: state-of-the-art and potential. *Nanotechnology*, **2015**, 26, 042001	3.4	54
37	Titania nanotube arrays for local drug delivery: recent advances and perspectives. *Expert Opinion on Drug Delivery*, **2015**, 12, 103-27	8	120
36	Engineered therapeutic-releasing nanoporous anodic alumina-aluminum wires with extended release of therapeutics. *ACS Applied Materials & Interfaces*, **2015**, 7, 3846-53	9.5	13
35	Advanced Structural Engineering of Nanoporous Photonic Structures: Tailoring Nanopore Architecture to Enhance Sensing Properties. *ACS Photonics*, **2014**, 1, 1298-1306	6.3	50
34	Drug-releasing implants: current progress, challenges and perspectives. *Journal of Materials Chemistry B*, **2014**, 2, 6157-6182	7.3	88
33	Structurally engineered anodic alumina nanotubes as nano-carriers for delivery of anticancer therapeutics. *Biomaterials*, **2014**, 35, 5517-26	15.6	52
32	Structural and optical nanoengineering of nanoporous anodic alumina rugate filters for real-time and label-free biosensing applications. *Analytical Chemistry*, **2014**, 86, 1837-44	7.8	79
31	Nanoporous anodic alumina rugate filters for sensing of ionic mercury: toward environmental point-of-analysis systems. *ACS Applied Materials & Interfaces*, **2014**, 6, 12971-8	9.5	63
30	Insitu monitored engineering of inverted nanoporous anodic alumina funnels: on the precise generation of 3D optical nanostructures. *Nanoscale*, **2014**, 6, 9991-9	7.7	39
29	Nanoporous anodic alumina platforms: engineered surface chemistry and structure for optical sensing applications. *Sensors*, **2014**, 14, 11878-918	3.8	104
28	Nanoporous Anodic Alumina: A Versatile Platform for Optical Biosensors. *Materials*, **2014**, 7, 4297-4320	3.5	89
27	Optically optimized photoluminescent and interferometric biosensors based on nanoporous anodic alumina: a comparison. *Analytical Chemistry*, **2013**, 85, 7904-11	7.8	59

26	Synthesis of well-organised carbon nanotube membranes from non-degradable plastic bags with tuneable molecular transport: Towards nanotechnological recycling. *Carbon*, **2013**, 63, 423-433	10.4	21
25	Ultrasensitive nanoporous interferometric sensor for label-free detection of gold(III) ions. *ACS Applied Materials & Interfaces*, **2013**, 5, 11783-90	9.5	59
24	Real-time and in situ drug release monitoring from nanoporous implants under dynamic flow conditions by reflectometric interference spectroscopy. *ACS Applied Materials & Interfaces*, **2013**, 5, 5436-42	9.5	36
23	Nanoporous anodic aluminum oxide for chemical sensing and biosensors. *TrAC - Trends in Analytical Chemistry*, **2013**, 44, 25-38	14.6	177
22	Optofluidic characterization of nanoporous membranes. *Langmuir*, **2013**, 29, 2784-9	4	23
21	Nanoporous anodic alumina obtained without protective oxide layer by hard anodization. *Materials Letters*, **2012**, 67, 296-299	3.3	35
20	On the mechanical properties of nanoporous anodized alumina by nanoindentation and sliding tests. *Surface and Coatings Technology*, **2012**, 206, 2115-2124	4.4	38
19	Nanoporous anodic alumina barcodes: toward smart optical biosensors. *Advanced Materials*, **2012**, 24, 1050-4	24	93
18	(Invited) Effects of the Nanostructure and Fabrication Process on the Photoluminescence Properties of PFO Nanopillar Arrays. *ECS Transactions*, **2012**, 45, 199-206	1	
17	Photoluminescent enzymatic sensor based on nanoporous anodic alumina. *ACS Applied Materials & Interfaces*, **2012**, 4, 3584-8	9.5	66
16	Structural tuning of photoluminescence in nanoporous anodic alumina by hard anodization in oxalic and malonic acids. *Nanoscale Research Letters*, **2012**, 7, 228	5	40
15	Tunable Fabry-Pï¿½ot interferometer based on nanoporous anodic alumina for optical biosensing purposes. *Nanoscale Research Letters*, **2012**, 7, 370	5	25
14	Effect of the anodization voltage on the pore-widening rate of nanoporous anodic alumina. *Nanoscale Research Letters*, **2012**, 7, 474	5	36
13	Understanding and morphology control of pore modulations in nanoporous anodic alumina by discontinuous anodization. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 2045-2048	1.6	23
12	Understanding pore rearrangement during mild to hard transition in bilayered porous anodic alumina membranes. *ACS Applied Materials & Interfaces*, **2011**, 3, 1925-32	9.5	38
11	Hierarchical nanoporous anodic alumina templates by asymmetric two-step anodization. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 668-674	1.6	22
10	Template-assisted fabrication and characterization of photoluminescent polymer nanopillars. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 2612-2616		3
9	Structural engineering of nanoporous anodic alumina funnels with high aspect ratio. *Journal of Electroanalytical Chemistry*, **2011**, 655, 73-78	4.1	47

8	Fabrication and characterization of high-density arrays of P3HT nanopillars on ITO/glass substrates. *Solar Energy Materials and Solar Cells*, **2010**, 94, 1247-1253	6.4	36
7	Quasi-ordered P3HT nanopillar-nanocap structures with controlled size. *Materials Letters*, **2010**, 64, 371-374	3.5	14
6	In situ electrochemical dissolution of the oxide barrier layer of porous anodic alumina fabricated by hard anodization. *Journal of Electroanalytical Chemistry*, **2009**, 632, 139-142	4.1	37
5	Cobalt and Nickel Nanopillars on Aluminium Substrates by Direct Current Electrodeposition Process. *Nanoscale Research Letters*, **2009**, 4, 1021-1028	5	29
4	Modified hard anodization procedure to fabricate hybrid nanoporous alumina **2009**,		2
3	Synthesis of Ordered Polymer Micro and Nanostructures Via Porous Templates **2009**,		3
2	Spray-n-Sense: Sprayable Nanofibers for On-Site Chemical Sensing. *Advanced Functional Materials*,2103496	15.6	1
1	Harnessing Slow Light in Optoelectronically Engineered Nanoporous Photonic Crystals for Visible Light-Enhanced Photocatalysis. *ACS Catalysis*,12947-12962	13.1	3