

# Nicolas D Boscher

## List of Publications by Year in descending order

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74  
papers

2,164  
citations

218381

26  
h-index

253896

43  
g-index

80  
all docs

80  
docs citations

80  
times ranked

2847  
citing authors

#	ARTICLE	IF	CITATIONS
1	Durable and scalable icephobic surfaces: similarities and distinctions from superhydrophobic surfaces. <i>Soft Matter</i> , 2016, 12, 1938-1963.	1.2	272
2	Atmospheric pressure chemical vapour deposition of SnSe and SnSe <sub>2</sub> thin films on glass. <i>Thin Solid Films</i> , 2008, 516, 4750-4757.	0.8	156
3	Atmospheric pressure chemical vapor deposition of WSe <sub>2</sub> thin films on glass—highly hydrophobic sticky surfaces. <i>Journal of Materials Chemistry</i> , 2006, 16, 122-127.	6.7	128
4	Transparent anti-fogging and self-cleaning TiO <sub>2</sub> /SiO <sub>2</sub> thin films on polymer substrates using atmospheric plasma. <i>Scientific Reports</i> , 2018, 8, 9603.	1.6	65
5	Atmospheric pressure chemical vapour deposition of vanadium diselenide thin films. <i>Applied Surface Science</i> , 2007, 253, 6041-6046.	3.1	64
6	A simple and scalable approach towards the preparation of superhydrophobic surfaces – importance of the surface roughness skewness. <i>Journal of Materials Chemistry A</i> , 2014, 2, 5744.	5.2	58
7	Atmospheric Pressure CVD of Molybdenum Diselenide Films on Glass. <i>Chemical Vapor Deposition</i> , 2006, 12, 692-698.	1.4	53
8	Atmospheric pressure plasma modified surfaces for immobilization of antimicrobial nisin peptides. <i>Surface and Coatings Technology</i> , 2013, 218, 152-161.	2.2	53
9	Atmospheric Pressure Pulsed Plasma Copolymerisation of Maleic Anhydride and Vinyltrimethoxysilane: Influence of Electrical Parameters on Chemistry, Morphology and Deposition Rate of the Coatings. <i>Plasma Processes and Polymers</i> , 2012, 9, 435-445.	1.6	51
10	Atmospheric Pressure Chemical Vapour Deposition of NbSe <sub>2</sub> Thin Films on Glass. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 1255-1259.	1.0	48
11	Interstitial Boron-Doped TiO <sub>2</sub> Thin Films: The Significant Effect of Boron on TiO <sub>2</sub> Coatings Grown by Atmospheric Pressure Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 25024-25029.	4.0	44
12	Photocatalytic Anatase TiO <sub>2</sub> Thin Films on Polymer Optical Fiber Using Atmospheric-Pressure Plasma. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 13733-13741.	4.0	42
13	Significance of a Noble Metal Nanolayer on the UV and Visible Light Photocatalytic Activity of Anatase TiO <sub>2</sub> Thin Films Grown from a Scalable PECVD/PVD Approach. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 41200-41209.	4.0	42
14	Robust bio-inspired antibacterial surfaces based on the covalent binding of peptides on functional atmospheric plasma thin films. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5168.	2.9	37
15	Room-Temperature Plasma-Assisted Inkjet Printing of Highly Conductive Silver on Paper. <i>Advanced Materials Technologies</i> , 2018, 3, 1700326.	3.0	35
16	Metal-Organic Covalent Network Chemical Vapor Deposition for Gas Separation. <i>Advanced Materials</i> , 2016, 28, 7479-7485.	11.1	34
17	Single-Step Process for the Deposition of High Water Contact Angle and High Water Sliding Angle Surfaces by Atmospheric Pressure Dielectric Barrier Discharge. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 1053-1060.	4.0	33
18	Atmospheric-Pressure Plasma Deposited Epoxy-Rich Thin Films as Platforms for Biomolecule Immobilization-Application for Anti-Biofouling and Xenobiotic-Degrading Surfaces. <i>Plasma Processes and Polymers</i> , 2015, 12, 1208-1219.	1.6	33

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19	Atmospheric Pressure Plasma Initiated Chemical Vapor Deposition Using Ultra-Short Square Pulse Dielectric Barrier Discharge. <i>Plasma Processes and Polymers</i> , 2015, 12, 66-74.	1.6	33
20	Chemical compositions of organosilicon thin films deposited on aluminium foil by atmospheric pressure dielectric barrier discharge and their electrochemical behaviour. <i>Surface and Coatings Technology</i> , 2010, 205, 2438-2448.	2.2	32
21	Atmospheric Pressure Plasma-Initiated Chemical Vapor Deposition (AP-PiCVD) of Poly(diethylallylphosphate) Coating: A Char-Forming Protective Coating for Cellulosic Textile. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 18418-18422.	4.0	32
22	Molecular Engineering of Porphyrin-Tapes/Phthalocyanine Heterojunctions for a Highly Sensitive Ammonia Sensor. <i>Advanced Electronic Materials</i> , 2020, 6, 2000812.	2.6	31
23	Fast Atmospheric Plasma Deposition of Bio-Inspired Catechol/Quinone-Rich Nanolayers to Immobilize NDM-Enzymes for Water Treatment. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500520.	1.9	30
24	A Novel Dry Chemical Path Way for Diene and Dienophile Surface Functionalization toward Thermally Responsive Metal-Polymer Adhesion. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 8446-8456.	4.0	29
25	Conductive Fused Porphyrin Tapes on Sensitive Substrates by a Chemical Vapor Deposition Approach. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2103-2108.	7.2	29
26	Atmospheric Pressure Plasma-Initiated Chemical Vapor Deposition (AP-PiCVD) of Poly(alkyl acrylates): An Experimental Study. <i>Macromolecules</i> , 2017, 50, 4351-4362.	2.2	27
27	Fused Porphyrin Thin Films as Heterogeneous Visible-Light Active Photocatalysts with Well-Defined Active Metal Sites for Hydrogen Generation. <i>ACS Applied Energy Materials</i> , 2020, 3, 9848-9855.	2.5	26
28	Atmospheric Pressure CVD of TiSe <sub>2</sub> Thin Films on Glass. <i>Chemical Vapor Deposition</i> , 2006, 12, 54-58.	1.4	25
29	Diene functionalisation of atmospheric plasma copolymer thin films. <i>Surface and Coatings Technology</i> , 2011, 205, S466-S469.	2.2	25
30	Atmospheric pressure, low temperature deposition of photocatalytic TiO <sub>2</sub> thin films with a blown arc discharge. <i>Surface and Coatings Technology</i> , 2013, 232, 159-165.	2.2	25
31	Functionalizable and electrically conductive thin films formed by oxidative chemical vapor deposition (oCVD) from mixtures of 3-thiopheneethanol (3TE) and ethylene dioxythiophene (EDOT). <i>Journal of Materials Chemistry C</i> , 2016, 4, 3403-3414.	2.7	25
32	Interstitial boron-doped anatase TiO <sub>2</sub> thin-films on optical fibres: atmospheric pressure-plasma enhanced chemical vapour deposition as the key for functional oxide coatings on temperature-sensitive substrates. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10836-10842.	5.2	25
33	Conductive Directly Fused Poly(Porphyrin) Coatings by Oxidative Chemical Vapour Deposition "From Single- to Triple-Fused. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 2368-2375.	1.2	25
34	Liquid-Assisted Plasma-Enhanced Chemical Vapor Deposition of Catechol and Quinone-Functionalized Coatings: Insights into the Surface Chemistry and Morphology. <i>Plasma Processes and Polymers</i> , 2016, 13, 843-856.	1.6	23
35	Advantages of a Pulsed Electrical Excitation Mode on the Corrosion Performance of Organosilicon Thin Films Deposited on Aluminium Foil by Atmospheric Pressure Dielectric Barrier Discharge. <i>Plasma Processes and Polymers</i> , 2010, 7, 163-171.	1.6	22
36	Nitrogen Introduction in pp-HMDSO Thin Films Deposited by Atmospheric Pressure Dielectric Barrier Discharge: An XPS Study. <i>Plasma Processes and Polymers</i> , 2012, 9, 316-323.	1.6	22

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37	Chemical vapour deposition of metalloporphyrins: a simple route towards the preparation of gas separation membranes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18144-18152.	5.2	22
38	Photocatalytic anatase titanium dioxide thin films deposition by an atmospheric pressure blown arc discharge. <i>Applied Surface Science</i> , 2014, 311, 721-728.	3.1	20
39	$\Gamma^{\pm}$ - and $\Gamma^{\pm 2}$ -Zinc-meso-A <sub>2</sub> B <sub>2</sub> -tetraarylporphyrins with large optical responses to triethylamine. <i>Dalton Transactions</i> , 2013, 42, 906-917.	1.6	19
40	Plasma Polymer Membranes for Immobilising Metalloporphyrins. <i>Plasma Processes and Polymers</i> , 2013, 10, 336-344.	1.6	19
41	Reactivity of Nickel(II) Porphyrins in oCVD Processes – Polymerisation, Intramolecular Cyclisation and Chlorination. <i>Chemistry - A European Journal</i> , 2019, 25, 8313-8320.	1.7	19
42	Molecular flattening effect to enhance the conductivity of fused porphyrin tape thin films. <i>RSC Advances</i> , 2020, 10, 7048-7057.	1.7	19
43	Photocatalytic Oxidation of Deposited Sulfur and Gaseous Sulfur Dioxide by TiO <sub>2</sub> Films. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5520-5525.	1.5	18
44	Atmospheric plasma oxidative polymerization of ethylene dioxythiophene (EDOT) for the large-scale preparation of highly transparent conducting thin films. <i>Plasma Processes and Polymers</i> , 2018, 15, 1700172.	1.6	18
45	Luminescent lanthanide-based hybrid coatings deposited by atmospheric pressure plasma assisted chemical vapour deposition. <i>Journal of Materials Chemistry</i> , 2011, 21, 18959.	6.7	17
46	Precursors for Atmospheric Plasma-Enhanced Sintering: Low-Temperature Inkjet Printing of Conductive Copper. <i>ChemistryOpen</i> , 2018, 7, 850-857.	0.9	17
47	Optical sensing responses of Cr(III)Cl <sub>3</sub> (TPP)(H <sub>2</sub> O)-based coatings obtained by an atmospheric pressure plasma method – Application to the detection of volatile amines. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 553-560.	4.0	16
48	Deeper Understanding of Interstitial Boron-Doped Anatase Thin Films as A Multifunctional Layer Through Theory and Experiment. <i>Journal of Physical Chemistry C</i> , 2018, 122, 714-726.	1.5	16
49	Chromium oxyselenide solid solutions from the atmospheric pressure chemical vapour deposition of chromyl chloride and diethylselenide. <i>Journal of Materials Chemistry</i> , 2008, 18, 1667.	6.7	15
50	Thermoresponsive Water-Soluble Polymer Layers and Water-Stable Copolymer Layers Synthesized by Atmospheric Plasma Initiated Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 1335-1343.	4.0	15
51	Enhanced Photocatalytic Hydrogen Evolution from Water Splitting on Ta <sub>2</sub> O <sub>5</sub> /SrZrO <sub>3</sub> Heterostructures Decorated with Cu <sub>x</sub> O/RuO <sub>2</sub> Cocatalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 31767-31781.	4.0	15
52	Atmospheric pressure plasma polymerisation of metalloporphyrins containing mesoporous membranes for gas sensing applications. <i>Surface and Coatings Technology</i> , 2013, 234, 48-52.	2.2	13
53	Self-Defensive Coating for Antibiotics Degradation – Atmospheric Pressure Chemical Vapor Deposition of Functional and Conformal Coatings for the Immobilization of Enzymes. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500253.	1.9	13
54	Insights in the initiation and termination of poly(alkyl acrylates) synthesized by atmospheric pressure plasma-initiated chemical vapor deposition (AP-PCVD). <i>Plasma Processes and Polymers</i> , 2018, 15, 1800027.	1.6	13

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55	Constitution and Conductivity of Metalloporphyrin Tapes. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1938-1945.	1.0	12
56	A new class of Zn <sup>II</sup> and Cr <sup>III</sup> porphyrins incorporated into porous polymer matrices via an atmospheric pressure plasma enhanced CVD to form gas sensing layers. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1560-1570.	5.2	11
57	Atmospheric pressure chemical vapour deposition of NbSe <sub>2</sub> /TiSe <sub>2</sub> composite thin films. <i>Applied Surface Science</i> , 2010, 256, 3178-3182.	3.1	10
58	Dual Application of (Aqua)(Chlorido)(Porphyrinato)Chromium(III) as Hypersensitive Amine-Triggered ON Switch and for Dioxigen Activation. <i>Inorganic Chemistry</i> , 2014, 53, 11086-11095.	1.9	10
59	Influence of cyclic organosilicon precursors on the corrosion of aluminium coated sheet by atmospheric pressure dielectric barrier discharge. <i>Surface and Coatings Technology</i> , 2011, 205, 5350-5357.	2.2	9
60	Gas Selective Ultrathin Organic Covalent Networks Synthesized by iPECVD: Does the Central Metal Ion Matter?. <i>Advanced Functional Materials</i> , 2017, 27, 1606652.	7.8	9
61	Pulsed plasma initiated chemical vapor deposition (PiCVD) of polymer layers – A kinetic model for the description of gas phase to surface interactions in pulsed plasma discharges. <i>Plasma Processes and Polymers</i> , 2018, 15, 1800121.	1.6	9
62	Fused Metalloporphyrin Thin Film with Tunable Porosity via Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 37732-37740.	4.0	9
63	Atmospheric-Pressure Synthesis of Atomically Smooth, Conformal, and Ultrathin Low- <i>k</i> Polymer Insulating Layers by Plasma-Initiated Chemical Vapor Deposition. <i>ACS Applied Polymer Materials</i> , 2019, 1, 3304-3312.	2.0	8
64	Electronic and energy level engineering of directly fused porphyrin-conjugated polymers – impact of the central metal cation. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2194-2204.	2.7	8
65	Synthesis and Characterisation of Chromium Oxyselenide (Cr <sub>2</sub> Se <sub>0.7</sub> O <sub>2.3</sub> ) Formed from Chemical Vapour Synthesis: A New Antiferromagnet. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 4579-4582.	1.0	7
66	Conductive Fused Porphyrin Tapes on Sensitive Substrates by a Chemical Vapor Deposition Approach. <i>Angewandte Chemie</i> , 2019, 131, 2125-2130.	1.6	6
67	Low Temperature Open-Air Plasma Deposition of SrTiO <sub>3</sub> Films for Solar Energy Harvesting: Impact of Precursors on the Properties and Performances. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 8527-8536.	4.0	6
68	Influence of double bonds and cyclic structure on the AP-PECVD of low- <i>k</i> organosilicon insulating layers. <i>Plasma Processes and Polymers</i> , 2021, 18, 2000222.	1.6	5
69	Liquid-Assisted Plasma-Enhanced Chemical Vapor Deposition of $\beta$ -Cyclodextrin/PDMS Composite Thin Film for the Preparation of Interferometric Sensors – Application to the Detection of Benzene in Water. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 10097-10103.	0.9	3
70	Insights into switchable thermoresponsive copolymer layers by atmospheric pressure plasma-initiated chemical vapour deposition. <i>Plasma Processes and Polymers</i> , 2020, 17, 1900172.	1.6	2
71	Plasma-initiated chemical vapour deposition of organosiloxane thin films: From the growth mechanisms to ultrathin low- <i>k</i> polymer insulating layers. <i>Plasma Processes and Polymers</i> , 2020, 17, 2000032.	1.6	1
72	Gas Separation: Metal-Organic Covalent Network Chemical Vapor Deposition for Gas Separation (Adv.) <i>Tj ETQq0,0,0 rgBT /Overlock 1</i>	11.1	0

#	ARTICLE	IF	CITATIONS
73	Gas Phase Synthesis and Deposition of Directly Fused Porphyrin Tapes: Reaction Mechanism and Central Metal Ion Effect.. ECS Meeting Abstracts, 2019, , .	0.0	0
74	Conductive Directly Fused Metalloporphyrin Coatings By Chemical Vapour Deposition “ from Singly to Triply Fused. ECS Meeting Abstracts, 2019, , .	0.0	0