## Stéphanie Roualdes

List of Publications by Year in descending order

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64 papers

1,702 citations

236912 25 h-index 302107 39 g-index

66 all docs 66 docs citations

66 times ranked 1972 citing authors

| #  | Article                                                                                                                                                                                                                                        | IF                 | CITATIONS            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------|
| 1  | Performance of plasma sputtered fuel cell electrodes with ultra-low Pt loadings. Electrochemistry Communications, 2009, 11, 859-861.                                                                                                           | 4.7                | 99                   |
| 2  | Mesoporous ZnFe <sub>2</sub> O <sub>4</sub> @TiO <sub>2</sub> Nanofibers Prepared by Electrospinning Coupled to PECVD as Highly Performing Photocatalytic Materials. Journal of Physical Chemistry C, 2017, 121, 24669-24677.                  | 3.1                | 88                   |
| 3  | New Fluorinated Polymers Bearing Pendant Phosphonic Acid Groups. Proton Conducting Membranes for Fuel Cell. Macromolecules, 2010, 43, 5269-5276.                                                                                               | 4.8                | 83                   |
| 4  | Facile fabrication of NiTiO3/graphene nanocomposites for photocatalytic hydrogen generation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 365, 86-93.                                                                        | 3.9                | 74                   |
| 5  | BN/GdxTi( $1-x$ )O( $4-x$ )/2 nanofibers for enhanced photocatalytic hydrogen production under visible light. Applied Catalysis B: Environmental, 2019, 251, 76-86.                                                                            | 20.2               | 73                   |
| 6  | Atomic layer deposition of Pd nanoparticles on self-supported carbon-Ni/NiO-Pd nanofiber electrodes for electrochemical hydrogen and oxygen evolution reactions. Journal of Colloid and Interface Science, 2020, 569, 286-297.                 | 9.4                | 68                   |
| 7  | Gas diffusion and sorption properties of polysiloxane membranes prepared by PECVD. Journal of Membrane Science, 2002, 198, 299-310.                                                                                                            | 8.2                | 58                   |
| 8  | Separation of H+/Cu2+ cations by electrodialysis using modified proton conducting membranes. Journal of Membrane Science, 2003, 216, 13-25.                                                                                                    | 8.2                | 55                   |
| 9  | Antibacterial properties of Ag–TiO <sub>2</sub> composite sol–gel coatings. RSC Advances, 2015, 5, 59070-59081.                                                                                                                                | 3.6                | 50                   |
| 10 | Enhancement of calcium copper titanium oxide photoelectrochemical performance using boron nitride nanosheets. Chemical Engineering Journal, 2020, 389, 124326.                                                                                 | 12.7               | 48                   |
| 11 | Sulfonated polystyrene-type plasma-polymerized membranes for miniature direct methanol fuel cells. Journal of Power Sources, 2006, 158, 1270-1281.                                                                                             | 7.8                | 47                   |
| 12 | Preparation of solid alkaline fuel cell binders based on fluorinated poly(diallyldimethylammonium) Tj ETQq0 0 0 rg of Polymer Science Part A, 2009, 47, 2043-2058.                                                                             | gBT /Overlo<br>2.3 | ock 10 Tf 50 :<br>47 |
| 13 | Coating porous membranes with a photocatalyst: Comparison of LbL self-assembly and plasma-enhanced CVD techniques. Journal of Membrane Science, 2016, 514, 340-349.                                                                            | 8.2                | 47                   |
| 14 | Coaxial nanofibers of nickel/gadolinium oxide/nickel oxide as highly effective electrocatalysts for hydrogen evolution reaction. Journal of Colloid and Interface Science, 2021, 587, 457-466.                                                 | 9.4                | 47                   |
| 15 | 29Si NMR and Si2p XPS correlation in polysiloxane membranes prepared by plasma enhanced chemical vapor deposition. Separation and Purification Technology, 2001, 25, 391-397.                                                                  | 7.9                | 44                   |
| 16 | Simultaneous hydrogen and oxygen evolution reactions using free-standing nitrogen-doped-carbon–Co/CoO <sub><i>x</i></sub> nanofiber electrodes decorated with palladium nanoparticles. Journal of Materials Chemistry A, 2021, 9, 17724-17739. | 10.3               | 41                   |
| 17 | Solid polymer fuel cell synthesis by low pressure plasmas: a short review. EPJ Applied Physics, 2006, 34, 151-156.                                                                                                                             | 0.7                | 41                   |
| 18 | Plasma-Polymerised Proton Conductive Membranes for a Miniaturised PEMFC. Fuel Cells, 2005, 5, 277-286.                                                                                                                                         | 2.4                | 40                   |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Surface investigation of plasma HMDSO membranes post-treated by CF4/Ar plasma. Applied Surface Science, 2002, 187, 326-338.                                                                                    | 6.1 | 39        |
| 20 | Gas separation properties of organosilicon plasma polymerized membranes. AICHE Journal, 1999, 45, 1566-1575.                                                                                                   | 3.6 | 38        |
| 21 | Highly textured boron/nitrogen co-doped TiO2 with honeycomb structure showing enhanced visible-light photoelectrocatalytic activity. Applied Surface Science, 2020, 505, 144419.                               | 6.1 | 38        |
| 22 | Functionalization of MCM-41 with titanium oxynitride deposited via PECVD for enhanced removal of methylene blue. Journal of Molecular Liquids, 2019, 274, 505-515.                                             | 4.9 | 37        |
| 23 | Design of Ni/NiO–TiO2/rGO nanocomposites on carbon cloth conductors via PECVD for electrocatalytic water splitting. International Journal of Hydrogen Energy, 2020, 45, 32000-32011.                           | 7.1 | 36        |
| 24 | Membranes produced by plasma enhanced chemical vapor deposition technique for low temperature fuel cell applications. Journal of Power Sources, 2010, 195, 232-238.                                            | 7.8 | 34        |
| 25 | Segregation of copper oxide on calcium copper titanate surface induced by Graphene Oxide for Water splitting applications. Applied Surface Science, 2020, 516, 146051.                                         | 6.1 | 31        |
| 26 | Plasma-grafted PVDF polymers as anion exchange membranes for the electrotransport of Cr(VI). Desalination, 2002, 146, 273-278.                                                                                 | 8.2 | 22        |
| 27 | Ionâ€Exchange Plasma Membranes for Fuel Cells on a Micrometer Scale. Chemical Vapor Deposition, 2007, 13, 361-369.                                                                                             | 1.3 | 22        |
| 28 | Microporous Silica Membrane: Basic Principles and Recent Advances. Membrane Science and Technology, 2008, 13, 33-79.                                                                                           | 0.5 | 22        |
| 29 | Water Transport Properties of Plasma-Modified Commercial Anion-Exchange Membrane for Solid Alkaline Fuel Cells. Journal of Physical Chemistry C, 2012, 116, 8510-8522.                                         | 3.1 | 22        |
| 30 | Organic/inorganic thin films deposited from diethoxydimethylsilane by plasma enhanced chemical vapor deposition. Journal of Non-Crystalline Solids, 1999, 248, 235-246.                                        | 3.1 | 21        |
| 31 | Optimization of N-doped TiO2 multifunctional thin layers by low frequency PECVD process. Journal of the European Ceramic Society, 2017, 37, 5289-5303.                                                         | 5.7 | 20        |
| 32 | TiO2 nanotree films for the production of green H2 by solar water splitting: From microstructural and optical characteristics to the photocatalytic properties. Applied Surface Science, 2019, 494, 1127-1137. | 6.1 | 20        |
| 33 | New photocatalytic contactors obtained by PECVD deposition of TiO 2 thin layers on the surface of macroporous supports. European Physical Journal: Special Topics, 2015, 224, 1871-1882.                       | 2.6 | 19        |
| 34 | Nanocrystalline TiO2 thin film prepared by low-temperature plasma-enhanced chemical vapor deposition for photocatalytic applications. Thin Solid Films, 2015, 589, 770-777.                                    | 1.8 | 18        |
| 35 | Superior efficiency of BN/Ce2O3/TiO2 nanofibers for photocatalytic hydrogen generation reactions. Applied Surface Science, 2022, 594, 153438.                                                                  | 6.1 | 18        |
| 36 | Mass density determination of thin organosilicon films by X-ray reflectometry. Applied Surface Science, 2001, 173, 115-121.                                                                                    | 6.1 | 16        |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Plasma-polymerized thin films as new membranes for miniature solid alkaline fuel cells. Desalination, 2006, 199, 286-288.                                                                                                                                                                            | 8.2 | 16        |
| 38 | Plasma Membranes Modified by Plasma Treatment or Deposition as Solid Electrolytes for Potential Application in Solid Alkaline Fuel Cells. Membranes, 2012, 2, 529-552.                                                                                                                               | 3.0 | 14        |
| 39 | Comparative performance of various plasma polysiloxane films for the pervaporative recovery of organics from aqueous streams. Journal of Membrane Science, 2003, 211, 113-126.                                                                                                                       | 8.2 | 13        |
| 40 | PECVD process for the preparation of proton conducting membranes for micro fuel cells. Impedance probe measurements and material characterizations. EPJ Applied Physics, 2008, 42, 9-15.                                                                                                             | 0.7 | 13        |
| 41 | Hybrid plasma polymerized membranes from organosilicon precursors for gas separation. European<br>Physical Journal Special Topics, 1999, 09, Pr8-1147-Pr8-1154.                                                                                                                                      | 0.2 | 11        |
| 42 | In-Situ Mass Spectrometry Analyses of the Fragmentation of Linear and Cyclic Siloxanes in a Glow Discharge Compared with Ex-Situ FTIR Analyses of the Deposits. Chemical Vapor Deposition, 2002, 8, 155.                                                                                             | 1.3 | 11        |
| 43 | Plasma-polymerized phosphonic acid-based membranes for fuel cell. Journal of Membrane Science, 2014, 461, 1-9.                                                                                                                                                                                       | 8.2 | 10        |
| 44 | Comparative study of bulk and surface compositions of plasma polymerized organosilicon thin films. Surfaces and Interfaces, 2021, 25, 101256.                                                                                                                                                        | 3.0 | 10        |
| 45 | Optimization of the molecular sieving properties of amorphous SiCXNY:H hydrogen selective membranes prepared by PECVD. European Physical Journal: Special Topics, 2015, 224, 1935-1943.                                                                                                              | 2.6 | 9         |
| 46 | Microwave PECVD Silicon Carbonitride Thin Films: A FTIR and Ellipsoporosimetry Study. Plasma Processes and Polymers, 2016, 13, 258-265.                                                                                                                                                              | 3.0 | 9         |
| 47 | Phosphonic acid-based membranes as proton conductors prepared by a pulsed plasma enhanced chemical vapor deposition technique. Thin Solid Films, 2018, 660, 506-515.                                                                                                                                 | 1.8 | 8         |
| 48 | Effect of plasma power on the semiconducting behavior of low-frequency PECVD TiO2 and nitrogen-doped TiO2 anodic thin coatings: photo-electrochemical studies in a single compartment cell for hydrogen generation by solar water splitting. Journal of Applied Electrochemistry, 2019, 49, 135-150. | 2.9 | 8         |
| 49 | Experimental design and modelling in the investigation of PECVD parameters effects on the structural and gas transport properties of plasma polysiloxane membranes. Journal of Membrane Science, 2004, 230, 39-48.                                                                                   | 8.2 | 7         |
| 50 | Chemical Investigation on Various Aromatic Compounds Polymerization in Low Pressure Helium Plasma. Plasma Chemistry and Plasma Processing, 2014, 34, 1219-1232.                                                                                                                                      | 2.4 | 7         |
| 51 | Vibrational frequencies of hydrogenated silicon carbonitride: A DFT study. Surface and Coatings Technology, 2017, 325, 437-444.                                                                                                                                                                      | 4.8 | 6         |
| 52 | Xâ€Ray Reflectometry Characterization of Plasma Polymer Films Synthesized from Triallylamine: Density and Swelling in Water. Plasma Processes and Polymers, 2013, 10, 517-525.                                                                                                                       | 3.0 | 4         |
| 53 | Plasma-treated phosphonic acid-based membranes for fuel cell. International Journal of Hydrogen Energy, 2016, 41, 15593-15604.                                                                                                                                                                       | 7.1 | 4         |
| 54 | Plasma processes for membranes modification or manufacture. Annales De Chimie: Science Des Materiaux, 2007, 32, 141-158.                                                                                                                                                                             | 0.4 | 4         |

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| 55 | Solid Polymer Fuel Cell synthesis by low pressure plasmas: a short review. EPJ Applied Physics, 2008, 43, 137-137.                                                                                                  | 0.7 | 3         |
| 56 | An application of carbon nanotubes for integrated circuit interconnects. , 2008, , .                                                                                                                                |     | 3         |
| 57 | Sorption and permeation of water through Plasma Enhanced Chemical Vapour Deposited phosphonic acid-based membranes. Thin Solid Films, 2020, 700, 137918.                                                            | 1.8 | 2         |
| 58 | Modelling of gas permeability for membranes prepared by PECVD. Journal of Membrane Science, 2005, 262, 42-48.                                                                                                       | 8.2 | 1         |
| 59 | Original Polystyrene Nanoballs Grown by Plasma Polymerization. IEEE Transactions on Plasma Science, 2011, 39, 2778-2779.                                                                                            | 1.3 | 1         |
| 60 | XPS and XPS valence band characterizations of amorphous or polymeric silicon based thin films prepared by PACVD from organosilicon monomers. European Physical Journal Special Topics, 1999, 09, Pr8-1059-Pr8-1068. | 0.2 | 0         |
| 61 | [P1.035] New Copolymers for Solid Alkaline Fuel Cell Membranes. Procedia Engineering, 2012, 44, 753-755.                                                                                                            | 1.2 | O         |
| 62 | Innovative Plasma Polymerized Membranes based on Phosphonic Acid Groups for Fuel Cell. Procedia Engineering, 2012, 44, 701-703.                                                                                     | 1.2 | 0         |
| 63 | Plasma Polymerization. , 2015, , 1-3.                                                                                                                                                                               |     | O         |
| 64 | Plasma Polymerized Membrane. , 2015, , 1-2.                                                                                                                                                                         |     | 0         |