David Cornil

List of Publications by Year
in descending order

41 papers	970 citations	471509 17 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	1559 citing authors

#	Article	IF	Citations
1	Depolarization Effects in Self-Assembled Monolayers: A Quantum-Chemical Insight. Advanced Functional Materials, 2007, 17, 1143-1148.	14.9	97
2	Large Work Function Shift of Gold Induced by a Novel Perfluorinated Azobenzeneâ€Based Selfâ€Assembled Monolayer. Advanced Materials, 2013, 25, 432-436.	21.0	93
3	Modulating the charge injection in organic field-effect transistors: fluorinated oligophenyl self-assembled monolayers for high work function electrodes. Journal of Materials Chemistry C, 2015, 3, 3007-3015.	5.5	62
4	Photoinduced work function changes by isomerization of a densely packed azobenzene-based SAM on Au: a joint experimental and theoretical study. Physical Chemistry Chemical Physics, 2011, 13, 14302.	2.8	61
5	Defectâ€Driven Interfacial Electronic Structures at an Organic/Metalâ€Oxide Semiconductor Heterojunction. Advanced Materials, 2014, 26, 4711-4716.	21.0	46
6	Self-assembly of an asymmetrically functionalized [6]helicene at liquid/solid interfaces. Chemical Communications, 2013, 49, 2207.	4.1	43
7	Oxygen vacancy stabilized zirconia (OVSZ); a joint experimental and theoretical study. Scripta Materialia, 2016, 124, 26-29.	5.2	43
8	Tuning the Electronic Bandgap of Graphdiyne by Hâ€Substitution to Promote Interfacial Charge Carrier Separation for Enhanced Photocatalytic Hydrogen Production. Advanced Functional Materials, 2021, 31, 2100994.	14.9	41
9	The role of selenium vacancies in the enhancement of electrocatalytic activity of CoNiSe2 for the oxygen evolution reaction. Journal of Power Sources, 2021, 514, 230596.	7.8	39
10	Development of a ReaxFF potential for Ag/Zn/O and application to Ag deposition on ZnO. Surface Science, 2016, 645, 67-73.	1.9	35
11	Work function shifts of a zinc oxide surface upon deposition of self-assembled monolayers: a theoretical insight. Physical Chemistry Chemical Physics, 2014, 16, 20887-20899.	2.8	33
12	Noncovalent Interactions between ([18]Crownâ€6)â€Tetracarboxylic Acid and Amino Acids: Electrosprayâ€Ionization Mass Spectrometry Investigation of the Chiralâ€Recognition Processes. Chemistry - A European Journal, 2008, 14, 11039-11049.	3.3	27
13	Work function modification of the (111) gold surface covered by long alkanethiol-based self-assembled monolayers. Physical Chemistry Chemical Physics, 2014, 16, 2866.	2.8	26
14	Dynamic Photoswitching of Electron Energy Levels at Hybrid ZnO/Organic Photochromic Molecule Junctions. Advanced Functional Materials, 2018, 28, 1800716.	14.9	26
15	Work-function modification of the (111) gold surface upon deposition of self-assembled monolayers based on alkanethiol derivatives. Journal of Electron Spectroscopy and Related Phenomena, 2013, 189, 32-38.	1.7	22
16	Graphene Meets Ionic Liquids: Fermi Level Engineering via Electrostatic Forces. ACS Nano, 2019, 13, 3512-3521.	14.6	22
17	Tuning Spin Current Injection at Ferromagnet-Nonmagnet Interfaces by Molecular Design. Physical Review Letters, 2020, 124, 027204.	7.8	19
18	Influence of the nature of the anchoring group on electron injection processes at dyeâ€“titania interfaces. Physical Chemistry Chemical Physics, 2017, 19, 29389-29401.	2.8	18

#	Article	IF	Citations
19	On the Sputtering of Titanium and Silver onto Liquids, Discussing the Formation of Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 26605-26612.	3.1	17
20	Fine Control of the Chemistry of Nitrogen Doping in TiO₂: A Joint Experimental and Theoretical Study. Journal of Physical Chemistry C, 2020, 124, 17401-17412.	3.1	17
21	Challenges for Incorporating Optical Switchability in Organic-Based Electronic Devices. ACS Applied Materials & Interfaces, 2021, 13, 27737-27748.	8.0	17
22	Prominent Electrode Material for Na-, K-, and Mg-ion Batteries: 2D Î²-Sb Monolayer. Energy & Fuels, 2022, 36, 7087-7095.	5.1	16
23	Workâ€Function Modification of Au and Ag Surfaces upon Deposition of Selfâ€Assembled Monolayers: Influence of the Choice of the Theoretical Approach and the Thiol Decomposition Scheme. ChemPhysChem, 2013, 14, 2939-2946.	2.1	14
24	Energy Level Alignment at Interfaces Between Au (111) and Thiolated Oligophenylenes of Increasing Chain Size: Theoretical Evidence of Pinning Effects. Advanced Theory and Simulations, 2018, 1, 1700020.	2.8	13
25	Switching the Electronic Properties of ZnO Surfaces with Negative Tâ€Type Photochromic Pyridylâ€dihydropyrene Layers and Impact of Fermi Level Pinning. Advanced Materials Interfaces, 2019, 6, 1900211.	3.7	13
26	Effect of the Molecular Polarizability of SAMs on the Work Function Modification of Gold: Closedâ€• versus Openâ€Shell Donorâ€“Acceptor SAMs. Advanced Materials Technologies, 2019, 4, 1800152.	5.8	13
27	Reducing p-type Schottky contact barrier in metal/ZnO heterostructure through Ni-doping. Applied Surface Science, 2021, 545, 149023.	6.1	12
28	Hierarchical self-assembly of enantiopure and racemic helicenes at the liquid/solid interface: from 2D to 3D. Nanoscale, 2017, 9, 18075-18080.	5.6	11
29	Co-sputtering of gold and copper onto liquids: a route towards the production of porous gold nanoparticles. Nanotechnology, 2020, 31, 455303.	2.6	11
30	Which Oxide for Low-Emissivity Glasses? First-Principles Modeling of Silver Adhesion. ACS Applied Materials & Interfaces, 2017, 9, 18346-18354.	8.0	10
31	Magnetron sputter deposition of silver onto castor oil: The effect of plasma parameters on nanoparticle properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 615, 126286.	4.7	10
32	Insights on the Formation of Nanoparticles Prepared by Magnetron Sputtering Onto Liquids: Gold Sputtered Onto Castor Oil as a Case Study. Frontiers in Nanotechnology, 2021, 3, .	4.8	10
33	Switching the electrical characteristics of TiO2 from n-type to p-type by ion implantation. Applied Surface Science, 2021, 563, 150274.	6.1	6
34	Enhanced Adhesion Energy at Oxide/Ag Interfaces for Low-Emissivity Glasses: Theoretical Insight into Doping and Vacancy Effects. ACS Applied Materials & Interfaces, 2020, 12, 40838-40849.	8.0	5
35	Theoretical characterization of the electronic properties of heterogeneous vertical stacks of 2D metal dichalcogenides containing one doped layer. Physical Chemistry Chemical Physics, 2020, 22, 14088-14098.	2.8	5
36	Glass Hardness Modification by Means of Ion Implantation: Electronic Doping versus Surface Composition Effect. Advanced Theory and Simulations, 2019, 2, 1900039.	2.8	4

#	Article	IF	Citations
37	Insights into the growth of nanoparticles in liquid polyol by thermal annealing. Nanoscale Advances, 2021, 3, 4780-4789.	4.6	4
38	Enhancement of oxygen evolution reaction by X-doped (XÂ= Se, S, P) holey graphitic carbon shell encapsulating NiCoFe nanoparticles: a combined experimental and theoretical study. Materials Today Chemistry, 2022, 23, 100706.	3.5	4
39	Photocatalysis: Tuning the Electronic Bandgap of Graphdiyne by Hâ€Substitution to Promote Interfacial Charge Carrier Separation for Enhanced Photocatalytic Hydrogen Production (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	13.9	1
40	Probing the interaction between 2,2â€²-bithiophene-5-carboxylic acid and TiO2 by photoelectron spectroscopy: A joint experimental and theoretical study. Journal of Chemical Physics, 2017, 147, 244704.	3.0	2
41	On the Role of Collective Electrostatic Effects in Electronic Level Pinning and Work Function Changes by Molecular Adlayers: The Case of Partially Fluorinated DNTTs Adsorbed Flatâ€Lying on Various Metals and Heteroâ€Structures. Advanced Materials Interfaces, 0, , 2200361.	3.7	0