Priv-Dozâ€dr Stijn F L Mertens

List of Publications by Year in descending order

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Version: 2024-02-01

48 papers

2,408 citations

331670 21 h-index 233421 45 g-index

50 all docs

50 docs citations

50 times ranked

3401 citing authors

#	Article	IF	Citations
1	Asymmetrical Schiff bases as inhibitors of mild steel corrosion in sulphuric acid media. Materials Chemistry and Physics, 2003, 78, 800-808.	4.0	433
2	Covalent Modification of Graphene and Graphite Using Diazonium Chemistry: Tunable Grafting and Nanomanipulation. ACS Nano, 2015, 9, 5520-5535.	14.6	274
3	Synergism and antagonism in mild steel corrosion inhibition by sodium dodecylbenzenesulphonate and hexamethylenetetramine. Corrosion Science, 2003, 45, 1473-1489.	6.6	250
4	Functionalization of Thioctic Acid-Capped Gold Nanoparticles for Specific Immobilization of Histidine-Tagged Proteins. Journal of the American Chemical Society, 2005, 127, 5689-5694.	13.7	248
5	Short-Term Deterioration of Polymer-Coated 55% Al-Zn â€" Part 1: Behavior of Thin Polymer Films. Corrosion, 1997, 53, 381-388.	1.1	140
6	2021 roadmap for sodium-ion batteries. JPhys Energy, 2021, 3, 031503.	5.3	125
7	Application of an asymmetric flow field flow fractionation multi-detector approach for metallic engineered nanoparticle characterization – Prospects and limitations demonstrated on Au nanoparticles. Analytica Chimica Acta, 2011, 706, 367-378.	5.4	85
8	Plasmon interactions between gold nanoparticles in aqueous solution with controlled spatial separation. Physical Chemistry Chemical Physics, 2006, 8, 1430.	2.8	65
9	From Redox Gating to Quantized Charging. Journal of the American Chemical Society, 2010, 132, 8187-8193.	13.7	65
10	Switching stiction and adhesion of a liquid on a solid. Nature, 2016, 534, 676-679.	27.8	65
11	Intrinsic Multistate Switching of Gold Clusters through Electrochemical Gating. Journal of the American Chemical Society, 2007, 129, 9162-9167.	13.7	61
12	Pronounced Electrochemical Amphotericity of a Fused Donor–Acceptor Compound: A Planar Merge of TTF with a TCNQ‶ype Bithienoquinoxaline. Chemistry - A European Journal, 2009, 15, 63-66.	3.3	58
13	Au@Hg Nanoalloy Formation Through Direct Amalgamation: Structural, Spectroscopic, and Computational Evidence for Slow Nanoscale Diffusion. Advanced Functional Materials, 2011, 21, 3259-3267.	14.9	43
14	Surface Structure of TiO ₂ Rutile (011) Exposed to Liquid Water. Journal of Physical Chemistry C, 2017, 121, 26424-26431.	3.1	37
15	Squeezing, Then Stacking: From Breathing Pores to Threeâ€Dimensional Ionic Selfâ€Assembly under Electrochemical Control. Angewandte Chemie - International Edition, 2014, 53, 12951-12954.	13.8	36
16	Multicomponent Selfâ€Assembly with a Shapeâ€Persistent <i>N</i> â€Heterotriangulene Macrocycle on Au(111). Chemistry - A European Journal, 2015, 21, 1652-1659.	3.3	33
17	Graphite and Graphene Fairy Circles: A Bottom-Up Approach for the Formation of Nanocorrals. ACS Nano, 2019, 13, 5559-5571.	14.6	32
18	"Ligandâ€Free―Cluster Quantized Charging in an Ionic Liquid. Angewandte Chemie - International Edition, 2011, 50, 9735-9738.	13.8	30

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19	Stability and Catalytic Performance of Reconstructed Fe $<$ sub $>$ 3 $<$ /sub $>$ 0 $<$ sub $>4</sub>001) and Fe₃0₄110) Surfaces during Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2019, 123, 8304-8311.$	3.1	30
20	Diazadithia[7]helicenes: Synthetic Exploration, Solidâ€State Structure, and Properties. Chemistry - A European Journal, 2013, 19, 12077-12085.	3.3	23
21	Corrosion due to differential aeration reconsidered. Journal of Electroanalytical Chemistry, 2001, 506, 61-63.	3.8	22
22	Silver Halide Colloid Precursors for the Synthesis of Monolayer-Protected Clusters. Langmuir, 2004, 20, 3289-3296.	3.5	20
23	Quantised double layer charging of monolayer-protected clusters in a room temperature ionic liquid. Electrochimica Acta, 2009, 54, 5006-5010.	5.2	19
24	Potential-driven molecular tiling of a charged polycyclic aromatic compound. Chemical Communications, 2014, 50, 10376-10378.	4.1	18
25	Self-Limiting Adsorption of WO ₃ Oligomers on Oxide Substrates in Solution. Journal of Physical Chemistry C, 2017, 121, 19743-19750.	3.1	18
26	Dynamics of ionic liquid mediated quantised charging of monolayer-protected clusters. Physical Chemistry Chemical Physics, 2010, 12, 5417.	2.8	17
27	Surface or bulk? Real-time manganese dissolution detection in a lithium-ion cathode. Electrochimica Acta, 2021, 386, 138373.	5.2	15
28	Area-selective passivation of sp ² carbon surfaces by supramolecular self-assembly. Nanoscale, 2017, 9, 5188-5193.	5.6	14
29	Nanoconfined self-assembly on a grafted graphitic surface under electrochemical control. Nanoscale, 2017, 9, 362-368.	5.6	14
30	Interfacial supramolecular electrochemistry. Current Opinion in Electrochemistry, 2018, 8, 156-163.	4.8	14
31	Short-Term Deterioration of Polymer-Coated 55% Al-Zn: Part 2 â€" Impedance Model for Inhibitor-Modified Surface. Corrosion, 1999, 55, 151-156.	1.1	12
32	Covalent versus Electrostatic Strategies for Nanoparticle Immobilisation. Electroanalysis, 2010, 22, 2940-2946.	2.9	12
33	Reversible Anionâ€Driven Switching of an Organic 2D Crystal at a Solid–Liquid Interface. Small, 2017, 13, 1702379.	10.0	12
34	Oneâ€Step Covalent Immobilization of βâ€Cyclodextrin on sp 2 Carbon Surfaces for Selective Trace Amount Probing of Guests. Advanced Functional Materials, 2019, 29, 1901488.	14.9	11
35	Study of zinc passivation in chromium(VI)-containing electrolytes with short-term impedance measurements. Corrosion Science, 2001, 43, 301-316.	6.6	10
36	Copper underpotential deposition on boron nitride nanomesh. Electrochimica Acta, 2017, 246, 730-736.	5.2	9

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37	Ambient Bistable Single Dipole Switching in a Molecular Monolayer. Angewandte Chemie - International Edition, 2020, 59, 14049-14053.	13.8	8
38	Zusammenrýcken und Stapeln: von atmenden Poren zu dreidimensionaler ionischer Selbstorganisation unter elektrochemischer Kontrolle. Angewandte Chemie, 2014, 126, 13165-13168.	2.0	5
39	Reliable Computational Prediction of the Supramolecular Ordering of Complex Molecules under Electrochemical Conditions. Journal of Chemical Theory and Computation, 2020, 16, 5227-5243.	5.3	5
40	Study of Interfacial Film Growth with ac Measurements. Journal of Colloid and Interface Science, 2000, 227, 517-524.	9.4	3
41	Dimensional changes during corrosion of polymer-coated metals. Corrosion Science, 2001, 43, 69-84.	6.6	3
42	Immersion transients reveal potential of zero charge of nanoparticle films. Electrochemistry Communications, 2012, 25, 128-131.	4.7	3
43	Ambient Bistable Single Dipole Switching in a Molecular Monolayer. Angewandte Chemie, 2020, 132, 14153-14157.	2.0	3
44	(Invited) Wetting, Adhesion and Stiction of 2D Materials. ECS Transactions, 2017, 80, 23-27.	0.5	0
45	(Invited) Switchable White Graphene: Electrochemistry of the Boron Nitride Nanomesh. ECS Meeting Abstracts, 2017, , .	0.0	0
46	(Invited) Wetting, Adhesion and Stiction of 2D Materials. ECS Meeting Abstracts, 2017, , .	0.0	0
47	Metal Underpotential Deposition to Quantify Defects in 2D Materials. ECS Meeting Abstracts, 2017, , .	0.0	0
48	One-Step Covalent Immobilization of \hat{I}^2 -Cyclodextrin on sp2 Carbon Surfaces for Ultrasensitive and Selective Guest Detection. ECS Meeting Abstracts, 2019, , .	0.0	O