# Matthieu Becuwe

## List of Publications by Year in descending order



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|---|---|---|---|
| 46 papers | 1,122 citations | 430874 18 h-index | 414414 32 g-index |
| 46 all docs | 46 docs citations | 46 times ranked | 1432 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A perspective on organic electrode materials and technologies for next generation batteries. Journal of Power Sources, 2021, 482, 228814. | 7.8 | 140 |
| 2 | Pseudocapacitance and excellent cyclability of 2,5-dimethoxy-1,4-benzoquinone on graphene. Energy and Environmental Science, 2016, 9, 2586-2594. | 30.8 | 129 |
| 3 | Lithium Insertion / De-Insertion Properties of Ï€-Extended Naphthyl-Based Dicarboxylate Electrode Synthesized by Freeze-Drying. Journal of the Electrochemical Society, 2014, 161, A46-A52. | 2.9 | 74 |
| 4 | Hyper-conjugated lithium carboxylate based on a perylene unit for high-rate organic lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 18225-18228. | 10.3 | 69 |
| 5 | An air-stable lithiated cathode material based on a 1,4-benzenedisulfonate backbone for organic Li-ion batteries. Journal of Materials Chemistry A, 2018, 6, 19182-19189. | 10.3 | 57 |
| 6 | Photochemical behaviour upon the inclusion for some volatile organic compounds in new fluorescent indolizine Î²-cyclodextrin sensors. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 185, 312-320. | 3.9 | 51 |
| 7 | Fluorescent Indolizine-b-Cyclodextrin Derivatives for the Detection of Volatile Organic Compounds. Sensors, 2008, 8, 3689-3705. | 3.8 | 49 |
| 8 | Organic Negative Electrode Materials for Metalâ€Ion and Molecularâ€Ion Batteries: Progress and Challenges from a Molecular Engineering Perspective. Advanced Energy Materials, 2021, 11, 2101562. | 19.5 | 44 |
| 9 | 2D-Layered Lithium Carboxylate Based on Biphenyl Core as Negative Electrode for Organic Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 546-554. | 6.7 | 41 |
| 10 | Phenothiazineâ€“MXene Aqueous Asymmetric Pseudocapacitors. ACS Applied Energy Materials, 2020, 3, 3144-3149. | 5.1 | 40 |
| 11 | Electrochemical polymerization of chloride doped PEDOT hierarchical porous nanostructure on graphite as a potential electrode for high performance supercapacitor. Electrochimica Acta, 2020, 354, 136669. | 5.2 | 37 |
| 12 | Decreasing redox voltage of terephthalate-based electrode material for Li-ion battery using substituent effect. Journal of Power Sources, 2017, 359, 198-204. | 7.8 | 36 |
| 13 | New fluorescent and electropolymerizable N-azacrown carbazole as a selective probe for iron (III) in aqueous media. Sensors and Actuators B: Chemical, 2012, 171-172, 1022-1028. | 7.8 | 35 |
| 14 | Improvement of Gold-Catalyzed Oxidation of Free Carbohydrates to Corresponding Aldonates Using Microwaves. ACS Sustainable Chemistry and Engineering, 2016, 4, 2432-2438. | 6.7 | 33 |
| 15 | SiO<sub>2</sub>/Ionic Liquid Hybrid Nanoparticles for Solid-State Lithium Ion Conduction. Chemistry of Materials, 2015, 27, 7926-7933. | 6.7 | 30 |
| 16 | Multi-electron redox asymmetric supercapacitors based on quinone-coupled viologen derivatives and Ti3C2Tx MXene. Materials Today Energy, 2020, 18, 100532. | 4.7 | 27 |
| 17 | Gold Catalysis and Photoactivation: A Fast and Selective Procedure for the Oxidation of Free Sugars. ACS Catalysis, 2018, 8, 1635-1639. | 11.2 | 26 |
| 18 | Reversible Anion Insertion in Molecular Phenothiazineâ€Based Redoxâ€Active Positive Material for Organic Ion Batteries. ChemSusChem, 2020, 13, 2364-2370. | 6.8 | 23 |

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|---|---|---|---|
| 19 | Substituent effect on redox potential of terephthalate-based electrode materials for lithium batteries. Electrochemistry Communications, 2018, 93, 71-75. | 4.7 | 21 |
| 20 | Tuneable fluorescent marker appended to Î²-cyclodextrin: a pH-driven molecular switch. Tetrahedron Letters, 2007, 48, 6186-6188. | 1.4 | 18 |
| 21 | A new sensitive organic/inorganic hybrid material based on titanium oxide for the potentiometric detection of iron(III). Journal of Colloid and Interface Science, 2012, 388, 130-136. | 9.4 | 13 |
| 22 | Mesoscale Texturation of Organic-Based Negative Electrode Material through in Situ Proton Reduction of Conjugated Carboxylic Acid. Chemistry of Materials, 2019, 31, 6224-6230. | 6.7 | 11 |
| 23 | Experimentally Validated Threeâ€Dimensional Modeling of Organicâ€Based Sodiumâ€Ion Battery Electrode Manufacturing. Batteries and Supercaps, 2022, 5, . | 4.7 | 11 |
| 24 | Turn-on/turn-off fluorescent hybrid silica nanoparticles. A new promising material for selective anionsâ€™ sensing. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 433, 88-94. | 4.7 | 10 |
| 25 | First Sustainable Aziridination of Olefins Using Recyclable Copper-Immobilized Magnetic Nanoparticles. Synlett, 2019, 30, 563-566. | 1.8 | 10 |
| 26 | Charge transport in phenazine-fused triphenylene discotic mesogens doped with CdS nanowires. New Journal of Chemistry, 2020, 44, 14872-14878. | 2.8 | 10 |
| 27 | Mechanistic Understanding of the Interactions and Pseudocapacitance of Multiâ€Electron Redox Organic Molecules Sandwiched between MXene Layers. Advanced Electronic Materials, 2021, 7, 2001202. | 5.1 | 10 |
| 28 | SYNTHESIS OF NEW FLUORESCENT Î²-CYCLODEXTRIN SENSOR. Heterocyclic Communications, 2005, 11, . | 1.2 | 7 |
| 29 | Efficient synthesis of amino-protected calix[4]arenes selectively functionalized with iron chelator ICL670 designed as platform for iron recognition. Tetrahedron, 2011, 67, 2916-2924. | 1.9 | 7 |
| 30 | Empowering organicâ€based negative electrode material based on conjugated lithium carboxylate through molecular design. ChemSusChem, 2020, 13, 2321-2327. | 6.8 | 7 |
| 31 | Calix[4]arene-modified silica nanoparticles for the potentiometric detection of iron (III) in aqueous solution. Comptes Rendus Chimie, 2012, 15, 290-297. | 0.5 | 6 |
| 32 | Hybrid Electrolytes Based on Optimized Ionic Liquid Quantity Tethered on ZrO<sub>2</sub> Nanoparticles for Solid-State Lithium-Ion Conduction. ACS Applied Materials & Interfaces, 2021, 13, 15159-15167. | 8.0 | 6 |
| 33 | Rapid synthesis of a versatile organic/inorganic hybrid material based on pyrogenic silica. Journal of Colloid and Interface Science, 2010, 350, 83-89. | 9.4 | 5 |
| 34 | Immobilization of fluorescent chemosensor on pyrogenic silica: A promising device for gaseous detection. Journal of Colloid and Interface Science, 2015, 450, 62-67. | 9.4 | 5 |
| 35 | Nitroxide supported on nanometric metal oxides as new hybrid catalysts for selective sugar oxidation. Journal of Colloid and Interface Science, 2019, 536, 526-535. | 9.4 | 4 |
| 36 | Internal structure investigation of pyrogenic modified silica by fluorescent labeling. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 384, 248-253. | 4.7 | 3 |

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|---|---|---|---|
| 37 | Spectroscopic investigation of the three prototropic forms of a Î²-cyclodextrin-indolizine derivative from its inclusion-cum-charge-transfer complexes. Chemical Physics Letters, 2011, 504, 100-106. | 2.6 | 3 |
| 38 | Excited state proton transfer assisted fluorescence resonance energy transfer in an inclusion complex of a Î²-CD derivative. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 238, 29-34. | 3.9 | 3 |
| 39 | Relating Electrochemistry of New Organic Materials for Batteries and Fundamental Understanding through DFT Calculations. Advances in Science and Technology, 0, , . | 0.2 | 3 |
| 40 | Nitroxide-Grafted Nanometric Metal Oxides for the Catalytic Oxidation of Sugar. ACS Applied Nano Materials, 2019, 2, 5200-5205. | 5.0 | 3 |
| 41 | Fundamental insight into the interaction between a lithium salt and an inorganic filler for ion mobility using a synergic theoretical-experimental approach. Journal of Colloid and Interface Science, 2022, 625, 734-742. | 9.4 | 3 |
| 42 | Surface modification of LiFePO4 nanoparticles through an organic/inorganic hybrid approach and its impact on electrochemical properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 645, 128952. | 4.7 | 2 |
| 43 | Poly[Î¼6-(naphthalene-2,6-dicarboxylato)-bis(aqualithium)]. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, m288-m288. | 0.2 | 0 |
| 44 | New Carbazole-Based Organic Electrodes for Next Generation of Sustainable Lithium Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 347-347. | 0.0 | 0 |
| 45 | (Invited) Contribution of Organic Molecular Compounds to Electrochemical Energy Storage. ECS Meeting Abstracts, 2020, MA2020-02, 344-344. | 0.0 | 0 |
| 46 | Optimization of Disodium Naphthalene Dicarboxylates Negative Electrode for Organic-Inorganic Hybrid Sodium Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 94-94. | 0.0 | 0 |