# Aamod V Desai

List of Publications by Year
in descending order



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|---|---|---|---|
| 68 papers | 7,785 citations | 81889 39 h-index | 106340 65 g-index |
| 70 all docs | 70 docs citations | 70 times ranked | 7536 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Metalâ€"organic frameworks: functional luminescent and photonic materials for sensing applications. Chemical Society Reviews, 2017, 46, 3242-3285. | 38.1 | 2,457 |
| 2 | A fluorescent metalâ€"organic framework for highly selective detection of nitro explosives in the aqueous phase. Chemical Communications, 2014, 50, 8915-8918. | 4.1 | 486 |
| 3 | Hydrogenâ€Bonded Organic Frameworks (HOFs): A New Class of Porous Crystalline Protonâ€Conducting Materials. Angewandte Chemie - International Edition, 2016, 55, 10667-10671. | 13.8 | 334 |
| 4 | A Waterâ€Stable Cationic Metalâ€"Organic Framework as a Dual Adsorbent of Oxoanion Pollutants. Angewandte Chemie - International Edition, 2016, 55, 7811-7815. | 13.8 | 302 |
| 5 | Selective and Sensitive Aqueousâ€Phase Detection of 2,4,6â€Trinitrophenol (TNP) by an Amineâ€Functionalized Metalâ€"Organic Framework. Chemistry - A European Journal, 2015, 21, 965-969. | 3.3 | 297 |
| 6 | Ionic metal-organic frameworks (iMOFs): Design principles and applications. Coordination Chemistry Reviews, 2016, 307, 313-341. | 18.8 | 261 |
| 7 | Guest-Responsive Metalâ€"Organic Frameworks as Scaffolds for Separation and Sensing Applications. Accounts of Chemical Research, 2017, 50, 2457-2469. | 15.6 | 241 |
| 8 | Engineering metalâ€"organic frameworks for aqueous phase 2,4,6-trinitrophenol (TNP) sensing. CrystEngComm, 2016, 18, 2994-3007. | 2.6 | 189 |
| 9 | Advanced Porous Materials for Sensing, Capture and Detoxification of Organic Pollutants toward Water Remediation. ACS Sustainable Chemistry and Engineering, 2019, 7, 7456-7478. | 6.7 | 189 |
| 10 | Aqueous phase selective detection of 2,4,6-trinitrophenol using a fluorescent metalâ€"organic framework with a pendant recognition site. Dalton Transactions, 2015, 44, 15175-15180. | 3.3 | 161 |
| 11 | Exploitation of Guest Accessible Aliphatic Amine Functionality of a Metalâ€"Organic Framework for Selective Detection of 2,4,6-Trinitrophenol (TNP) in Water. Crystal Growth and Design, 2015, 15, 4627-4634. | 3.0 | 137 |
| 12 | Selective Recognition of Hg<sup>2+</sup> ion in Water by a Functionalized Metalâ€"Organic Framework (MOF) Based Chemodosimeter. Inorganic Chemistry, 2018, 57, 2360-2364. | 4.0 | 131 |
| 13 | 2021 roadmap for sodium-ion batteries. JPhys Energy, 2021, 3, 031503. | 5.3 | 125 |
| 14 | Stimulusâ€Responsive Metalâ€"Organic Frameworks. Chemistry - an Asian Journal, 2014, 9, 2358-2376. | 3.3 | 109 |
| 15 | Metal-organic framework based highly selective fluorescence turn-on probe for hydrogen sulphide. Scientific Reports, 2014, 4, 7053. | 3.3 | 109 |
| 16 | Potential of metalâ€"organic frameworks for adsorptive separation of industrially and environmentally relevant liquid mixtures. Coordination Chemistry Reviews, 2018, 367, 82-126. | 18.8 | 105 |
| 17 | Ultrastable Luminescent Hybrid Bromide Perovskite@MOF Nanocomposites for the Degradation of Organic Pollutants in Water. ACS Applied Nano Materials, 2019, 2, 1333-1340. | 5.0 | 102 |
| 18 | N-donor linker based metal-organic frameworks (MOFs): Advancement and prospects as functional materials. Coordination Chemistry Reviews, 2019, 395, 146-192. | 18.8 | 98 |

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|---|---|---|---|
| 19 | A Nitroâ€Functionalized Metalâ€“Organic Framework as a Reactionâ€Based Fluorescence Turnâ€On Probe for Rapid and Selective H<sub>2</sub>S Detection. Chemistry - A European Journal, 2015, 21, 9994-9997. | 3.3 | 93 |
| 20 | An Ultrahydrophobic Fluorous Metalâ€“Organic Framework Derived Recyclable Composite as a Promising Platform to Tackle Marine Oil Spills. Chemistry - A European Journal, 2016, 22, 10937-10943. | 3.3 | 91 |
| 21 | A Postâ€Synthetically Modified MOF for Selective and Sensitive Aqueousâ€Phase Detection of Highly Toxic Cyanide Ions. Chemistry - A European Journal, 2016, 22, 864-868. | 3.3 | 91 |
| 22 | Chemically stable ionic viologen-organic network: an efficient scavenger of toxic oxo-anions from water. Chemical Science, 2018, 9, 7874-7881. | 7.4 | 91 |
| 23 | Aqueous phase nitric oxide detection by an amine-decorated metalâ€“organic framework. Chemical Communications, 2015, 51, 6111-6114. | 4.1 | 83 |
| 24 | Framework-Flexibility Driven Selective Sorption of p-Xylene over Other Isomers by a Dynamic Metal-Organic Framework. Scientific Reports, 2014, 4, 5761. | 3.3 | 81 |
| 25 | A Waterâ€Stable Ionic MOF for the Selective Capture of Toxic Oxoanions of Se<sup>VI</sup> and As<sup>V</sup> and Crystallographic Insight into the Ionâ€Exchange Mechanism. Angewandte Chemie - International Edition, 2020, 59, 7788-7792. | 13.8 | 79 |
| 26 | Harnessing Lewis acidic open metal sites of metalâ€“organic frameworks: the foremost route to achieve highly selective benzene sorption over cyclohexane. Chemical Communications, 2016, 52, 8215-8218. | 4.1 | 76 |
| 27 | Hydrogenâ€Bonded Organic Frameworks (HOFs): A New Class of Porous Crystalline Protonâ€Conducting Materials. Angewandte Chemie, 2016, 128, 10825-10829. | 2.0 | 76 |
| 28 | Neutral N-donor ligand based flexible metalâ€“organic frameworks. Dalton Transactions, 2016, 45, 4060-4072. | 3.3 | 73 |
| 29 | Selective Detection of 2,4,6-Trinitrophenol (TNP) by a Ï€-Stacked Organic Crystalline Solid in Water. Crystal Growth and Design, 2015, 15, 3493-3497. | 3.0 | 70 |
| 30 | A Ï€-electron deficient diaminotriazine functionalized MOF for selective sorption of benzene over cyclohexane. Chemical Communications, 2015, 51, 15386-15389. | 4.1 | 64 |
| 31 | A Waterâ€Stable Cationic Metalâ€“Organic Framework as a Dual Adsorbent of Oxoanion Pollutants. Angewandte Chemie, 2016, 128, 7942-7946. | 2.0 | 59 |
| 32 | An Amideâ€Functionalized Dynamic Metalâ€“Organic Framework Exhibiting Visual Colorimetric Anion Exchange and Selective Uptake of Benzene over Cyclohexane. Chemistry - A European Journal, 2015, 21, 7071-7076. | 3.3 | 56 |
| 33 | Aqueous phase sensing of cyanide ions using a hydrolytically stable metalâ€“organic framework. Chemical Communications, 2017, 53, 1253-1256. | 4.1 | 56 |
| 34 | Advances in Organic Anode Materials for Naâ€/Kâ€Ion Rechargeable Batteries. ChemSusChem, 2020, 13, 4866-4884. | 6.8 | 55 |
| 35 | Selective Anion Exchange and Tunable Luminescent Behaviors of Metalâ€“Organic Framework Based Supramolecular Isomers. Inorganic Chemistry, 2015, 54, 110-116. | 4.0 | 53 |
| 36 | Exploiting Framework Flexibility of a Metalâ€“Organic Framework for Selective Adsorption of Styrene over Ethylbenzene. Inorganic Chemistry, 2015, 54, 4403-4408. | 4.0 | 50 |

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|---|---|---|---|
| 37 | Base-Resistant Ionic Metal-Organic Framework as a Porous Ion-Exchange Sorbent. IScience, 2018, 3, 21-30. | 4.1 | 50 |
| 38 | Hydrophobic Shielding of Outer Surface: Enhancing the Chemical Stability of Metalâ€“Organic Polyhedra. Angewandte Chemie - International Edition, 2019, 58, 1041-1045. | 13.8 | 45 |
| 39 | Guestâ€Responsive Function of a Dynamic Metalâ€“Organic Framework with a Ï€ Lewis Acidic Pore Surface. Chemistry - A European Journal, 2014, 20, 15303-15308. | 3.3 | 43 |
| 40 | Rapid, selective capture of toxic oxo-anions of Se(<scp>iv</scp>), Se(<scp>vi</scp>) and As(<scp>v</scp>) from water by an ionic metalâ€“organic framework (iMOF). Journal of Materials Chemistry A, 2021, 9, 6499-6507. | 10.3 | 39 |
| 41 | Enhanced proton conduction by post-synthetic covalent modification in a porous covalent framework. Journal of Materials Chemistry A, 2017, 5, 13659-13664. | 10.3 | 38 |
| 42 | Dynamic Metalâ€“Organic Framework with Anion-Triggered Luminescence Modulation Behavior. Inorganic Chemistry, 2014, 53, 12225-12227. | 4.0 | 37 |
| 43 | Bimodal Functionality in a Porous Covalent Triazine Framework by Rational Integration of an Electronâ€Rich and â€Deficient Pore Surface. Chemistry - A European Journal, 2016, 22, 4931-4937. | 3.3 | 36 |
| 44 | Chemically stable microporous hyper-cross-linked polymer (HCP): an efficient selective cationic dye scavenger from an aqueous medium. Materials Chemistry Frontiers, 2017, 1, 1384-1388. | 5.9 | 34 |
| 45 | Polar Pore Surface Guided Selective CO<sub>2</sub> Adsorption in a Prefunctionalized Metalâ€“Organic Framework. Crystal Growth and Design, 2017, 17, 3581-3587. | 3.0 | 34 |
| 46 | High hydroxide conductivity in a chemically stable crystalline metalâ€“organic framework containing a water-hydroxide supramolecular chain. Chemical Communications, 2016, 52, 8459-8462. | 4.1 | 32 |
| 47 | Anionâ€Responsive Tunable Bulkâ€Phase Homochirality and Luminescence of a Cationic Framework. Chemistry - A European Journal, 2014, 20, 12399-12404. | 3.3 | 31 |
| 48 | A luminescent cationic MOF for bimodal recognition of chromium and arsenic based oxo-anions in water. Dalton Transactions, 2021, 50, 10133-10141. | 3.3 | 25 |
| 49 | Probing the Role of Anions in Influencing the Structure, Stability, and Properties in Neutral N-Donor Linker Based Metalâ€“Organic Frameworks. Crystal Growth and Design, 2019, 19, 7046-7054. | 3.0 | 23 |
| 50 | Efficient Capture of Trace Acetylene by an Ultramicroporous Metalâ€“Organic Framework with Purine Binding Sites. Chemistry of Materials, 2021, 33, 5800-5808. | 6.7 | 22 |
| 51 | Single-crystal-to-single-crystal transformation of an anion exchangeable dynamic metalâ€“organic framework. CrystEngComm, 2015, 17, 8796-8800. | 2.6 | 20 |
| 52 | Multifunctional Behavior of Sulfonate-Based Hydrolytically Stable Microporous Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2018, 10, 39049-39055. | 8.0 | 18 |
| 53 | Post-synthetically modified metalâ€“organic framework as a scaffold for selective bisulphite recognition in water. Polyhedron, 2018, 156, 1-5. | 2.2 | 17 |
| 54 | Coherent Fusion of Water Array and Protonated Amine in a Metalâ€“Sulfate-Based Coordination Polymer for Proton Conduction. Inorganic Chemistry, 2015, 54, 5366-5371. | 4.0 | 16 |

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|---|---|---|---|
| 55 | A Waterâ€Stable Ionic MOF for the Selective Capture of Toxic Oxoanions of Se VI and As V and Crystallographic Insight into the Ionâ€Exchange Mechanism. Angewandte Chemie, 2020, 132, 7862-7866. | 2.0 | 13 |
| 56 | A Bifunctional Metalâ€“Organic Framework: Striking CO<sub>2</sub>â€Selective Sorption Features along with Guestâ€Induced Tuning of Luminescence. ChemPlusChem, 2016, 81, 702-707. | 2.8 | 12 |
| 57 | Toxic Aromatics Induced Responsive Facets for a Pore Surface Functionalized Luminescent Coordination Polymer. Inorganic Chemistry, 2017, 56, 6864-6869. | 4.0 | 10 |
| 58 | Conversion of a microwave synthesized alkali-metal MOF to a carbonaceous anode for Li-ion batteries. RSC Advances, 2020, 10, 13732-13736. | 3.6 | 10 |
| 59 | Hydrophobic Shielding of Outer Surface: Enhancing the Chemical Stability of Metalâ€“Organic Polyhedra. Angewandte Chemie, 2019, 131, 1053-1057. | 2.0 | 8 |
| 60 | Specific recognition of toxic allyl alcohol by pore-functionalized metalâ€“organic frameworks. Molecular Systems Design and Engineering, 2020, 5, 469-476. | 3.4 | 8 |
| 61 | Mechanochemical synthesis of sodium carboxylates as anode materials in sodium ion batteries. Journal of Materials Chemistry A, 2021, 9, 27361-27369. | 10.3 | 7 |
| 62 | Solvothermal Synthesis of a Novel Calcium Metal-Organic Framework: High Temperature and Electrochemical Behaviour. Molecules, 2021, 26, 7048. | 3.8 | 7 |
| 63 | Rapid Microwaveâ€Assisted Synthesis and Electrode Optimization of Organic Anode Materials in Sodiumâ€Ion Batteries. Small Methods, 2021, 5, e2101016. | 8.6 | 7 |
| 64 | Metal-organic frameworks for recognition and sequestration of toxic anionic pollutants. , 2019, , 95-140. | | 6 |
| 65 | Synthesis and structural elucidation of neutral N-donor linker based bi-porous isostructural cationic metal-organic frameworks. Inorganica Chimica Acta, 2019, 486, 401-405. | 2.4 | 3 |
| 66 | A structural investigation of organic battery anode materials by NMR crystallography. Magnetic Resonance in Chemistry, 2022, 60, 489-503. | 1.9 | 3 |
| 67 | Ultrahigh Ionic Conduction in Water-Stable Close-Packed Metal-Carbonate Frameworks. Inorganic Chemistry, 2017, 56, 9710-9715. | 4.0 | 1 |
| 68 | Post-synthetically modified porous covalent framework (PCF) for high proton conduction. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C1156-C1156. | 0.1 | 0 |