

Leonard J Prins

List of Publications by Year in descending order

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Version: 2024-02-01

105
papers

6,865
citations

66343

42
h-index

60623

81
g-index

121
all docs

121
docs citations

121
times ranked

5719
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Progressive Local Accumulation of Self-Assembled Nanoreactors in a Hydrogel Matrix through Repetitive Injections of ATP. <i>Journal of the American Chemical Society</i> , 2022, 144, 2010-2018. | 13.7 | 16 |
| 2 | Dissipative Control over the Toehold-Mediated DNA Strand Displacement Reaction. <i>Angewandte Chemie</i> , 2022, 134, . | 2.0 | 1 |
| 3 | Dissipative Control over the Toehold-Mediated DNA Strand Displacement Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 33 |
| 4 | Dissipative DNA nanotechnology. <i>Nature Chemistry</i> , 2022, 14, 600-613. | 13.6 | 72 |
| 5 | Chemically Fueled Self-Assembly in Biology and Chemistry. <i>Angewandte Chemie</i> , 2021, 133, 20280-20303. | 2.0 | 24 |
| 6 | Self-Assembled Multivalent Ag-SR Coordination Polymers with Phosphatase-Like Activity. <i>Chemistry - A European Journal</i> , 2021, 27, 7646-7650. | 3.3 | 5 |
| 7 | Reorganization of Self-Assembled DNA-Based Polymers using Orthogonally Addressable Building Blocks**. <i>Angewandte Chemie</i> , 2021, 133, 13021-13027. | 2.0 | 3 |
| 8 | Reorganization of Self-Assembled DNA-Based Polymers using Orthogonally Addressable Building Blocks**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12911-12917. | 13.8 | 20 |
| 9 | Chemically Fueled Self-Assembly in Biology and Chemistry. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20120-20143. | 13.8 | 160 |
| 10 | Spontaneous Reorganization of DNA-Based Polymers in Higher Ordered Structures Fueled by RNA. <i>Journal of the American Chemical Society</i> , 2021, 143, 20296-20301. | 13.7 | 21 |
| 11 | ATP-fuelled self-assembly to regulate chemical reactivity in the time domain. <i>Chemical Science</i> , 2020, 11, 1518-1522. | 7.4 | 36 |
| 12 | Time-gated fluorescence signalling under dissipative conditions. <i>Chemical Communications</i> , 2020, 56, 13979-13982. | 4.1 | 12 |
| 13 | Enhanced catalytic activity under non-equilibrium conditions. <i>Nature Nanotechnology</i> , 2020, 15, 868-874. | 31.5 | 60 |
| 14 | Disulfide-Linked Allosteric Modulators for Multi-cycle Kinetic Control of DNA-Based Nanodevices. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21058-21063. | 13.8 | 22 |
| 15 | Disulfide-Linked Allosteric Modulators for Multi-cycle Kinetic Control of DNA-Based Nanodevices. <i>Angewandte Chemie</i> , 2020, 132, 21244-21249. | 2.0 | 9 |
| 16 | Nucleotide-Selective Templated Self-Assembly of Nanoreactors under Dissipative Conditions. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22223-22229. | 13.8 | 21 |
| 17 | Nucleotide-Selective Templated Self-Assembly of Nanoreactors under Dissipative Conditions. <i>Angewandte Chemie</i> , 2020, 132, 22407-22413. | 2.0 | 7 |
| 18 | Transient DNA-Based Nanostructures Controlled by Redox Inputs. <i>Angewandte Chemie</i> , 2020, 132, 13340-13347. | 2.0 | 15 |

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|----|--|------|-----------|
| 19 | Hydrolytic Nanozymes. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 5044-5055. | 2.4 | 36 |
| 20 | Titelbild: Transient DNA-Based Nanostructures Controlled by Redox Inputs (<i>Angew. Chem.</i> 32/2020). <i>Angewandte Chemie</i> , 2020, 132, 13225-13225. | 2.0 | 0 |
| 21 | Template-Dependent (Ir)reversibility of Noncovalent Synthesis Pathways. <i>ChemSystemsChem</i> , 2020, 2, e1900063. | 2.6 | 2 |
| 22 | Transient DNA-Based Nanostructures Controlled by Redox Inputs. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 13238-13245. | 13.8 | 60 |
| 23 | Fuel-Responsive Allosteric DNA-Based Aptamers for the Transient Release of ATP and Cocaine. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5582-5586. | 13.8 | 86 |
| 24 | Titelbild: Fuel-Responsive Allosteric DNA-Based Aptamers for the Transient Release of ATP and Cocaine (<i>Angew. Chem.</i> 17/2019). <i>Angewandte Chemie</i> , 2019, 131, 5828-5828. | 2.0 | 0 |
| 25 | Fuel-Responsive Allosteric DNA-Based Aptamers for the Transient Release of ATP and Cocaine. <i>Angewandte Chemie</i> , 2019, 131, 5638-5642. | 2.0 | 31 |
| 26 | Stepwise Hierarchical Self-Assembly of Supramolecular Amphiphiles into Higher-Order Three-Dimensional Nanostructures. <i>ChemNanoMat</i> , 2018, 4, 821-830. | 2.8 | 6 |
| 27 | Spatially controlled clustering of nucleotide-stabilized vesicles. <i>Chemical Communications</i> , 2018, 54, 4818-4821. | 4.1 | 10 |
| 28 | Dissipative Synthetic DNA-Based Receptors for the Transient Loading and Release of Molecular Cargo. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10489-10493. | 13.8 | 82 |
| 29 | Fuel-Selective Transient Activation of Nanosystems for Signal Generation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1611-1615. | 13.8 | 50 |
| 30 | Fuel-Selective Transient Activation of Nanosystems for Signal Generation. <i>Angewandte Chemie</i> , 2018, 130, 1627-1631. | 2.0 | 30 |
| 31 | Dissipative Synthetic DNA-Based Receptors for the Transient Loading and Release of Molecular Cargo. <i>Angewandte Chemie</i> , 2018, 130, 10649-10653. | 2.0 | 35 |
| 32 | Distance between Metal Centres Affects Catalytic Efficiency of Dinuclear Co ^{III} Complexes in the Hydrolysis of a Phosphate Diester. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 5375-5381. | 2.4 | 11 |
| 33 | Substrate-Induced Self-Assembly of Cooperative Catalysts. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16469-16474. | 13.8 | 76 |
| 34 | Substrate-Induced Self-Assembly of Cooperative Catalysts. <i>Angewandte Chemie</i> , 2018, 130, 16707-16712. | 2.0 | 33 |
| 35 | Energy consumption in chemical fuel-driven self-assembly. <i>Nature Nanotechnology</i> , 2018, 13, 882-889. | 31.5 | 306 |
| 36 | Titelbild: Dissipative Synthetic DNA-Based Receptors for the Transient Loading and Release of Molecular Cargo (<i>Angew. Chem.</i> 33/2018). <i>Angewandte Chemie</i> , 2018, 130, 10934-10934. | 2.0 | 0 |

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|----|--|------|-----------|
| 37 | Photoswitchable Catalysis by a Nanozyme Mediated by a Light-Sensitive Cofactor. <i>Journal of the American Chemical Society</i> , 2017, 139, 1794-1797. | 13.7 | 110 |
| 38 | Transient self-assembly of molecular nanostructures driven by chemical fuels. <i>Current Opinion in Biotechnology</i> , 2017, 46, 27-33. | 6.6 | 94 |
| 39 | A modular self-assembled sensing system for heavy metal ions with tunable sensitivity and selectivity. <i>Tetrahedron</i> , 2017, 73, 4950-4954. | 1.9 | 9 |
| 40 | Temporal Control over Transient Chemical Systems using Structurally Diverse Chemical Fuels. <i>Chemistry - A European Journal</i> , 2017, 23, 11549-11559. | 3.3 | 33 |
| 41 | Hydrolytic Metallo-Nanozymes: From Micelles and Vesicles to Gold Nanoparticles. <i>Molecules</i> , 2016, 21, 1014. | 3.8 | 56 |
| 42 | Catalytic signal amplification for the discrimination of ATP and ADP using functionalised gold nanoparticles. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6811-6820. | 2.8 | 12 |
| 43 | Dissipative self-assembly of vesicular nanoreactors. <i>Nature Chemistry</i> , 2016, 8, 725-731. | 13.6 | 355 |
| 44 | Reversible Electrochemical Modulation of a Catalytic Nanosystem. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10737-10740. | 13.8 | 21 |
| 45 | Reversible Electrochemical Modulation of a Catalytic Nanosystem. <i>Angewandte Chemie</i> , 2016, 128, 10895-10898. | 2.0 | 2 |
| 46 | Orthogonal Sensing of Small Molecules Using a Modular Nanoparticle-Based Assay. <i>ChemNanoMat</i> , 2016, 2, 489-493. | 2.8 | 5 |
| 47 | Dynamic nanoproteins: self-assembled peptide surfaces on monolayer protected gold nanoparticles. <i>Chemical Communications</i> , 2016, 52, 9387-9390. | 4.1 | 11 |
| 48 | Chiral Nanozymes-Gold Nanoparticle-Based Transphosphorylation Catalysts Capable of Enantiomeric Discrimination. <i>Chemistry - A European Journal</i> , 2016, 22, 7028-7032. | 3.3 | 52 |
| 49 | Frontispiece: Chiral Nanozymes-Gold Nanoparticle-Based Transphosphorylation Catalysts Capable of Enantiomeric Discrimination. <i>Chemistry - A European Journal</i> , 2016, 22, . | 3.3 | 0 |
| 50 | Label-free fluorescence detection of kinase activity using a gold nanoparticle based indicator displacement assay. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 1198-1203. | 2.8 | 8 |
| 51 | Dynamic combinatorial chemistry on a monolayer protected gold nanoparticle. <i>Chemical Communications</i> , 2015, 51, 5714-5716. | 4.1 | 22 |
| 52 | Emergence of Complex Chemistry on an Organic Monolayer. <i>Accounts of Chemical Research</i> , 2015, 48, 1920-1928. | 15.6 | 70 |
| 53 | Transient signal generation in a self-assembled nanosystem fueled by ATP. <i>Nature Communications</i> , 2015, 6, 7790. | 12.8 | 112 |
| 54 | Zn ²⁺ -Regulated Self-Sorting and Mixing of Phosphates and Carboxylates on the Surface of Functionalized Gold Nanoparticles. <i>Angewandte Chemie</i> , 2014, 126, 2136-2141. | 2.0 | 15 |

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|----|---|------|-----------|
| 55 | Light-Triggered Thiol-Exchange on Gold Nanoparticles at Low Micromolar Concentrations in Water. <i>Langmuir</i> , 2014, 30, 13831-13836. | 3.5 | 10 |
| 56 | Multivalent Interactions Regulate Signal Transduction in a Self-Assembled Hg ²⁺ Sensor. <i>Journal of the American Chemical Society</i> , 2014, 136, 11288-11291. | 13.7 | 71 |
| 57 | Zn ²⁺ -Regulated Self-Sorting and Mixing of Phosphates and Carboxylates on the Surface of Functionalized Gold Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2104-2109. | 13.8 | 30 |
| 58 | Dynamic covalent capture of hydrazides by a phosphonate-target immobilized on resin. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 6580. | 2.8 | 5 |
| 59 | Pattern-based sensing of nucleotides with functionalized gold nanoparticles. <i>Chemical Communications</i> , 2013, 49, 469-471. | 4.1 | 52 |
| 60 | Thread and cut. <i>Nature Chemistry</i> , 2013, 5, 899-900. | 13.6 | 3 |
| 61 | Catalysis on gold-nanoparticle-passivating monolayers. <i>Current Opinion in Colloid and Interface Science</i> , 2013, 18, 61-69. | 7.4 | 24 |
| 62 | Controlling Supramolecular Complex Formation on the Surface of a Monolayer-Protected Gold Nanoparticle in Water. <i>Langmuir</i> , 2013, 29, 7180-7185. | 3.5 | 37 |
| 63 | Catalysis of Transesterification Reactions by a Self-Assembled Nanosystem. <i>International Journal of Molecular Sciences</i> , 2013, 14, 2011-2021. | 4.1 | 8 |
| 64 | Development of an Enzyme Mimic Using Self-Selection. <i>Israel Journal of Chemistry</i> , 2013, 53, 122-126. | 2.3 | 5 |
| 65 | Reversible Control over the Valency of a Nanoparticle-Based Supramolecular System. <i>Journal of the American Chemical Society</i> , 2012, 134, 15289-15292. | 13.7 | 18 |
| 66 | Self-Assembly of a Catalytic Multivalent Peptide-Nanoparticle Complex. <i>Journal of the American Chemical Society</i> , 2012, 134, 8396-8399. | 13.7 | 150 |
| 67 | Self-assembly and selective exchange of oligoanions on the surface of monolayer protected Au nanoparticles in water. <i>Chemical Communications</i> , 2012, 48, 1916. | 4.1 | 50 |
| 68 | Catalytic self-assembled monolayers on gold nanoparticles. <i>New Journal of Chemistry</i> , 2012, 36, 1931. | 2.8 | 63 |
| 69 | A multivalent HIV-1 fusion inhibitor based on small helical foldamers. <i>Tetrahedron</i> , 2012, 68, 4346-4352. | 1.9 | 6 |
| 70 | Sensing through signal amplification. <i>Chemical Society Reviews</i> , 2011, 40, 4488. | 38.1 | 153 |
| 71 | ¹³ C-isotope labelling for the facilitated NMR analysis of a complex dynamic chemical system. <i>Chemical Communications</i> , 2011, 47, 12476. | 4.1 | 10 |
| 72 | Detection of Enzyme Activity through Catalytic Signal Amplification with Functionalized Gold Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 2307-2312. | 13.8 | 87 |

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|----|---|------|-----------|
| 73 | Catalytic Self-Assembled Monolayers on Au Nanoparticles: The Source of Catalysis of a Transphosphorylation Reaction. <i>Chemistry - A European Journal</i> , 2011, 17, 4879-4889. | 3.3 | 81 |
| 74 | Assessment of the morphology of mixed SAMs on Au nanoparticles using a fluorescent probe. <i>Chemical Communications</i> , 2011, 47, 445-447. | 4.1 | 38 |
| 75 | Dynamic Approaches towards Catalyst Discovery. <i>European Journal of Organic Chemistry</i> , 2010, 2010, 2429-2440. | 2.4 | 81 |
| 76 | The Advantage of Covalent Capture in the Combinatorial Screening of a Dynamic Library for the Detection of Weak Interactions. <i>European Journal of Organic Chemistry</i> , 2010, 2010, 3858-3866. | 2.4 | 8 |
| 77 | Covalent Capture: Merging Covalent and Noncovalent Synthesis. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2288-2306. | 13.8 | 84 |
| 78 | Indirect Optical Analysis of a Dynamic Chemical System. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4546-4550. | 13.8 | 18 |
| 79 | Resin-supported catalytic dendrimers as multivalent artificial metallonucleases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 3816-3820. | 2.2 | 25 |
| 80 | Multivalent Cooperative Catalysts. <i>Current Organic Chemistry</i> , 2009, 13, 1050-1064. | 1.6 | 20 |
| 81 | Functionalization of Tripodal Scaffold Molecules on Solid Support. <i>European Journal of Organic Chemistry</i> , 2008, 2008, 3559-3568. | 2.4 | 4 |
| 82 | Exploiting Neighboring-Group Interactions for the Self-Selection of a Catalytic Unit. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2475-2479. | 13.8 | 49 |
| 83 | Real-time monitoring of a dynamic molecular system using ¹ H- ¹³ C HSQC NMR spectroscopy with an optimized ¹³ C window. <i>Chemical Communications</i> , 2008, , 3034. | 4.1 | 20 |
| 84 | Origin of the Dendritic Effect in Multivalent Enzyme-Like Catalysts. <i>Journal of the American Chemical Society</i> , 2008, 130, 5699-5709. | 13.7 | 50 |
| 85 | C ₃ -Symmetric Ti(IV) Triphenolate Amino Complexes as Sulfoxidation Catalysts with Aqueous Hydrogen Peroxide. <i>Organic Letters</i> , 2007, 9, 21-24. | 4.6 | 93 |
| 86 | Metallodendrimers as Transphosphorylation Catalysts. <i>Journal of the American Chemical Society</i> , 2007, 129, 6982-6983. | 13.7 | 65 |
| 87 | Limitations of the "tethering" strategy for the detection of a weak noncovalent interaction. <i>Chemical Communications</i> , 2007, , 1340-1342. | 4.1 | 20 |
| 88 | Tripodal, Cooperative, and Allosteric Transphosphorylation Metallocatalysts. <i>Journal of Organic Chemistry</i> , 2007, 72, 376-385. | 3.2 | 52 |
| 89 | Fully symmetrical functionalization of multivalent scaffold molecules on solid support. <i>Tetrahedron</i> , 2006, 62, 11670-11674. | 1.9 | 7 |
| 90 | Effective synthesis of ortho-substituted triphenol amines via reductive amination. <i>Tetrahedron Letters</i> , 2006, 47, 2735-2738. | 1.4 | 33 |

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|-----|---|------|-----------|
| 91 | Ti(IV)/trialkanolamine catalytic polymeric membranes: Preparation, characterization, and use in oxygen transfer reactions. <i>Journal of Catalysis</i> , 2006, 238, 221-231. | 6.2 | 21 |
| 92 | Determination of the activity of heterofunctionalized catalysts from mixtures. <i>New Journal of Chemistry</i> , 2006, 30, 1493. | 2.8 | 7 |
| 93 | Oligopeptide Foldamers: From Structure to Function. <i>European Journal of Organic Chemistry</i> , 2005, 2005, 969-977. | 2.4 | 86 |
| 94 | Ti(IV)-based catalytic membranes for efficient and selective oxidation of secondary amines. <i>Tetrahedron Letters</i> , 2004, 45, 7515-7518. | 1.4 | 18 |
| 95 | Kinetic Stabilities of Double, Tetra-, and Hexarosette Hydrogen-Bonded Assemblies. <i>Journal of Organic Chemistry</i> , 2002, 67, 4808-4820. | 3.2 | 52 |
| 96 | Diastereoselective Noncovalent Synthesis of Hydrogen-Bonded Double-Rosette Assemblies. <i>Chemistry - A European Journal</i> , 2002, 8, 2288. | 3.3 | 31 |
| 97 | Enantioselective Noncovalent Synthesis of Hydrogen-Bonded Double-Rosette Assemblies. <i>Chemistry - A European Journal</i> , 2002, 8, 2302. | 3.3 | 27 |
| 98 | Thermodynamic Stabilities of Linear and Crinkled Tapes and Cyclic Rosettes in Melamine ²⁺ Cyanurate Assemblies: A Model Description. <i>Journal of the American Chemical Society</i> , 2001, 123, 7518-7533. | 13.7 | 153 |
| 99 | Amplification of Chirality: The "Sergeants and Soldiers" Principle Applied to Dynamic Hydrogen-Bonded Assemblies. <i>Journal of the American Chemical Society</i> , 2001, 123, 10153-10163. | 13.7 | 151 |
| 100 | Noncovalent Synthesis Using Hydrogen Bonding. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2382-2426. | 13.8 | 1,110 |
| 101 | An enantiomerically pure hydrogen-bonded assembly. <i>Nature</i> , 2000, 408, 181-184. | 27.8 | 293 |
| 102 | Control of Structural Isomerism in Noncovalent Hydrogen-Bonded Assemblies Using Peripheral Chiral Information. <i>Journal of the American Chemical Society</i> , 2000, 122, 3617-3627. | 13.7 | 87 |
| 103 | Complete asymmetric induction of supramolecular chirality in a hydrogen-bonded assembly. <i>Nature</i> , 1999, 398, 498-502. | 27.8 | 446 |
| 104 | Self-Assembly of Rodlike Hydrogen-Bonded Nanostructures. <i>Journal of the American Chemical Society</i> , 1999, 121, 7154-7155. | 13.7 | 103 |
| 105 | Convergent and Divergent Noncovalent Synthesis of Metallodendrimers. <i>Journal of the American Chemical Society</i> , 1998, 120, 6240-6246. | 13.7 | 109 |