# Marko D Mihovilovic

## List of Publications by Citations



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| 204 papers | 6,871 citations | 40 h-index | 75 g-index |
| 254 ext. papers | 7,740 ext. citations | 4.8 avg, IF | 5.91 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 204 | Discovery and resupply of pharmacologically active plant-derived natural products: A review. *Biotechnology Advances*, **2015**, 33, 1582-1614 | 17.8 | 1267 |
| 203 | Opportunities and challenges for combining chemo- and biocatalysis. *Nature Catalysis*, **2018**, 1, 12-22 | 36.5 | 333 |
| 202 | Cross-Coupling Reactions on Azoles with Two and More Heteroatoms. *European Journal of Organic Chemistry*, **2006**, 2006, 3283-3307 | 3.2 | 252 |
| 201 | Cascade catalysis--strategies and challenges en route to preparative synthetic biology. *Chemical Communications*, **2015**, 51, 5798-811 | 5.8 | 240 |
| 200 | Recent developments in the application of Baeyer-Villiger monooxygenases as biocatalysts. *ChemBioChem*, **2010**, 11, 2208-31 | 3.8 | 171 |
| 199 | Facile, solvent and ligand free iron catalyzed direct functionalization of N-protected tetrahydroisoquinolines and isochroman. *Chemical Communications*, **2010**, 46, 8836-8 | 5.8 | 152 |
| 198 | Halogen dance reactions--a review. *Chemical Society Reviews*, **2007**, 36, 1046-57 | 58.5 | 135 |
| 197 | Direct functionalization of (un)protected tetrahydroisoquinoline and isochroman under iron and copper catalysis: two metals, two mechanisms. *Journal of Organic Chemistry*, **2011**, 76, 8781-93 | 4.2 | 127 |
| 196 | Self-sufficient Baeyer-Villiger monooxygenases: effective coenzyme regeneration for biooxygenation by fusion engineering. *Angewandte Chemie - International Edition*, **2008**, 47, 2275-8 | 16.4 | 111 |
| 195 | Tandem catalysis: from alkynoic acids and aryl iodides to 1,2,3-triazoles in one pot. *Journal of Organic Chemistry*, **2011**, 76, 2613-8 | 4.2 | 101 |
| 194 | Microbial Baeyer-Villiger oxidation: stereopreference and substrate acceptance of cyclohexanone monooxygenase mutants prepared by directed evolution. *Organic Letters*, **2006**, 8, 1221-4 | 6.2 | 93 |
| 193 | Efficient biooxidations catalyzed by a new generation of self-sufficient Baeyer-Villiger monooxygenases. *ChemBioChem*, **2009**, 10, 2595-8 | 3.8 | 89 |
| 192 | Asymmetric oxidations at sulfur catalyzed by engineered strains that overexpress cyclohexanone monooxygenase. *New Journal of Chemistry*, **1999**, 23, 827-832 | 3.6 | 89 |
| 191 | Enantioselective Baeyer-Villiger Oxidations. *Current Organic Chemistry*, **2004**, 8, 1057-1069 | 1.7 | 84 |
| 190 | Asymmetric Baeyer-Villiger oxidations of 4-mono- and 4,4-disubstituted cyclohexanones by whole cells of engineered Escherichia coli. *Journal of Organic Chemistry*, **2001**, 66, 733-8 | 4.2 | 83 |
| 189 | Half-Lives of Organolithium Reagents in Common Ethereal Solvents. *Journal of Organic Chemistry*, **1997**, 62, 1514-1515 | 4.2 | 80 |
| 188 | Baeyer-Villiger oxidations: biotechnological approach. *Applied Microbiology and Biotechnology*, **2016**, 100, 6585-6599 | 5.7 | 79 |

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| 187 | Family clustering of Baeyer-Villiger monooxygenases based on protein sequence and stereopreference. *Angewandte Chemie - International Edition*, **2005**, 44, 3609-13 | 16.4 | 79 |
| 186 | An Enzymatic Toolbox for Cascade Reactions: A Showcase for an In Vivo Redox Sequence in Asymmetric Synthesis. *ChemCatChem*, **2013**, 5, 3524-3528 | 5.2 | 78 |
| 185 | Metal-assisted multicomponent reactions involving carbon monoxide--towards heterocycle synthesis. *Angewandte Chemie - International Edition*, **2007**, 46, 3612-5 | 16.4 | 70 |
| 184 | Exploiting the regioselectivity of Baeyer-Villiger monooxygenases for the formation of beta-amino acids and beta-amino alcohols. *Angewandte Chemie - International Edition*, **2010**, 49, 4506-8 | 16.4 | 69 |
| 183 | Ruthenium(0)-catalyzed sp3 C-H bond arylation of benzylic amines using arylboronates. *Organic Letters*, **2012**, 14, 1930-3 | 6.2 | 62 |
| 182 | Microbial Baeyer-Villiger oxidation of terpenones by recombinant whole-cell biocatalysts--formation of enantiocomplementary regioisomeric lactones. *Organic and Biomolecular Chemistry*, **2007**, 5, 1715-9 | 3.9 | 57 |
| 181 | A marine bacterial enzymatic cascade degrades the algal polysaccharide ulvan. *Nature Chemical Biology*, **2019**, 15, 803-812 | 11.7 | 52 |
| 180 | From waste to value □direct utilization of limonene from orange peel in a biocatalytic cascade reaction towards chiral carvolactone. *Green Chemistry*, **2017**, 19, 367-371 | 10 | 51 |
| 179 | Baeyer-Villiger oxidations of representative heterocyclic ketones by whole cells of engineered Escherichia coli expressing cyclohexanone monooxygenase. *Journal of Molecular Catalysis B: Enzymatic*, **2001**, 11, 349-353 | | 50 |
| 178 | Functionalization of Saturated and Unsaturated Heterocycles via Transition Metal Catalyzed C-H Activation Reactions. *Current Organic Chemistry*, **2011**, 15, 2694-2730 | 1.7 | 48 |
| 177 | First enantiodivergent Baeyer-Villiger oxidation by recombinant whole-cells expressing two monooxygenases from Brevibacterium. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 1479-82 | 2.9 | 48 |
| 176 | Baker's Yeast-Mediated Reductions of alpha-Keto Esters and an alpha-Keto-beta-Lactam. Two Routes to the Paclitaxel Side Chain. *Journal of Organic Chemistry*, **1999**, 64, 6603-6608 | 4.2 | 48 |
| 175 | Efficient modulation of □aminobutyric acid type A receptors by piperine derivatives. *Journal of Medicinal Chemistry*, **2014**, 57, 5602-19 | 8.3 | 47 |
| 174 | Single Operation Stereoselective Synthesis of Aerangis Lactones: Combining Continuous Flow Hydrogenation and Biocatalysts in a Chemoenzymatic Sequence. *ChemCatChem*, **2013**, 5, 724-727 | 5.2 | 47 |
| 173 | Designer Microorganisms for Optimized Redox Cascade Reactions □Challenges and Future Perspectives. *Advanced Synthesis and Catalysis*, **2015**, 357, 1587-1618 | 5.6 | 45 |
| 172 | Halogenated 2'-chlorobithiazoles via Pd-catalyzed cross-coupling reactions. *Journal of Organic Chemistry*, **2006**, 71, 3754-61 | 4.2 | 45 |
| 171 | Mechanistic investigations and substrate scope evaluation of ruthenium-catalyzed direct sp3 arylation of benzylic positions directed by 3-substituted pyridines. *Journal of Organic Chemistry*, **2013**, 78, 658-72 | 4.2 | 43 |
| 170 | Accessing tetrahydrofuran-based natural products by microbial Baeyer-Villiger biooxidation. *Chemical Communications*, **2006**, 3214-6 | 5.8 | 42 |

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| 169 | Resolution of fused bicyclic ketones by a recombinant biocatalyst expressing the Baeyer-Villiger monooxygenase gene Rv3049c from Mycobacterium tuberculosis H37Rv. *Bioorganic and Medicinal Chemistry Letters*, **2006**, 16, 4813-7 | 2.9 | 41 |
| 168 | Synthesis of novel pyrazolo[3,4-d]pyrimidine derivatives as potential anti-breast cancer agents. *European Journal of Medicinal Chemistry*, **2012**, 57, 323-8 | 6.8 | 40 |
| 167 | Stereoselective Desymmetrizations by Recombinant Whole Cells Expressing the Baeyer□Villiger Monooxygenase from Xanthobacter sp. ZL5: A New Biocatalyst Accepting Structurally Demanding Substrates. *European Journal of Organic Chemistry*, **2008**, 2008, 1203-1213 | 3.2 | 40 |
| 166 | Optimizing Fermentation Conditions of RecombinantEscherichia coliExpressing Cyclopentanone Monooxygenase. *Organic Process Research and Development*, **2006**, 10, 599-604 | 3.9 | 40 |
| 165 | Regiodivergent Baeyer□Villiger oxidation of fused ketone substrates by recombinant whole-cells expressing two monooxygenases from Brevibacterium. *Tetrahedron Letters*, **2004**, 45, 2751-2754 | 2 | 40 |
| 164 | Direct Arylation of Benzo[]furan and Other Benzo-Fused Heterocycles. *European Journal of Organic Chemistry*, **2014**, 2014, 8119-8125 | 3.2 | 39 |
| 163 | Identification of novel positive allosteric modulators and null modulators at the GABAA receptor □□interface. *British Journal of Pharmacology*, **2013**, 169, 371-83 | 8.6 | 39 |
| 162 | Selective Ru(0)-catalyzed deuteration of electron-rich and electron-poor nitrogen-containing heterocycles. *Journal of Organic Chemistry*, **2012**, 77, 4432-7 | 4.2 | 37 |
| 161 | Regiodivergent Baeyer-Villiger oxidation of fused ketones by recombinant whole-cell biocatalysts. *ChemSusChem*, **2008**, 1, 143-8 | 8.3 | 37 |
| 160 | Biooxidation of bridged cycloketones using Baeyer-Villiger monooxygenases of various bacterial origin. *Journal of Organic Chemistry*, **2007**, 72, 9597-603 | 4.2 | 36 |
| 159 | Ruthenium(II)-catalyzed sp3 C-H bond arylation of benzylic amines using aryl halides. *Organic Letters*, **2012**, 14, 3792-5 | 6.2 | 35 |
| 158 | Novel and efficient access to phenylamino-pyrimidine type protein kinase C inhibitors utilizing a Negishi cross-coupling strategy. *Journal of Organic Chemistry*, **2005**, 70, 5215-20 | 4.2 | 35 |
| 157 | Extensive substrate profiling of cyclopentadecanone monooxygenase as Baeyer□Villiger biocatalyst reveals novel regiodivergent oxidations. *Journal of Molecular Catalysis B: Enzymatic*, **2011**, 73, 9-16 | | 34 |
| 156 | Extending the substrate scope of a Baeyer-Villiger monooxygenase by multiple-site mutagenesis. *Applied Microbiology and Biotechnology*, **2014**, 98, 4009-20 | 5.7 | 33 |
| 155 | Kinetic resolution of aliphatic acyclic beta-hydroxyketones by recombinant whole-cell Baeyer-Villiger monooxygenases--formation of enantiocomplementary regioisomeric esters. *Bioorganic and Medicinal Chemistry Letters*, **2009**, 19, 3739-43 | 2.9 | 33 |
| 154 | Microwave-mediated intramolecular Diels□Alder cyclization of biodihydroxylated benzoic acid derivatives. *Tetrahedron Letters*, **2004**, 45, 7087-7090 | 2 | 33 |
| 153 | In vitro characterization of an enzymatic redox cascade composed of an alcohol dehydrogenase, an enoate reductases and a Baeyer-Villiger monooxygenase. *Journal of Biotechnology*, **2014**, 192 Pt B, 393-9 | 3.7 | 32 |
| 152 | Type II Flavin-Containing Monooxygenases: A New Class of Biocatalysts that Harbors Baeyer□Villiger Monooxygenases with a Relaxed Coenzyme Specificity. *ChemCatChem*, **2014**, 6, 1112-1117 | 5.2 | 31 |

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| 151 | Biooxidation of ketones with a cyclobutanone structural motif by recombinant whole-cells expressing 4-hydroxyacetophenone monooxygenase. *Journal of Molecular Catalysis B: Enzymatic*, **2005**, 32, 135-140 | | 31 |
| 150 | Enzymatic synthesis of enantiomerically pure beta-amino ketones, beta-amino esters, and beta-amino alcohols with Baeyer-Villiger monooxygenases. *Chemistry - A European Journal*, **2010**, 16, 9525-35 | 4.8 | 30 |
| 149 | Synthesis of enantiomerically pure bicyclo[4.2.0]octanes by Cu-catalyzed [2+2] photocycloaddition and enantiotopos-differentiating ring opening. *Angewandte Chemie - International Edition*, **2006**, 45, 5541-3 | 16.4 | 30 |
| 148 | Identification, Characterization, and Application of Three Enoate Reductases from Pseudomonas putida in In Vitro Enzyme Cascade Reactions. *ChemCatChem*, **2014**, 6, 1021-1027 | 5.2 | 29 |
| 147 | Quantitative Comparison of Chiral Catalysts Selectivity and Performance: A Generic Concept Illustrated with Cyclododecanone Monooxygenase as Baeyer□Villiger Biocatalyst. *Advanced Synthesis and Catalysis*, **2012**, 354, 3491-3500 | 5.6 | 29 |
| 146 | A facile and green synthetic route to boronic acid esters utilizing mechanochemistry. *Green Chemistry*, **2007**, 9, 139-145 | 10 | 29 |
| 145 | Baeyer-Villiger monooxygenases in aroma compound synthesis. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 6135-8 | 2.9 | 28 |
| 144 | Microbial Baeyer□Villiger Oxidation of Prochiral Polysubstituted Cyclohexanones by Recombinant Whole-Cells Expressing Two Bacterial Monooxygenases. *European Journal of Organic Chemistry*, **2005**, 2005, 809-816 | 3.2 | 28 |
| 143 | Design and Synthesis of Novel Deuterated Ligands Functionally Selective for the □Aminobutyric Acid Type A Receptor (GABAR) □ Subtype with Improved Metabolic Stability and Enhanced Bioavailability. *Journal of Medicinal Chemistry*, **2018**, 61, 2422-2446 | 8.3 | 26 |
| 142 | Continuous testing system for Baeyer-Villiger biooxidation using recombinant Escherichia coli expressing cyclohexanone monooxygenase encapsulated in polyelectrolyte complex capsules. *Enzyme and Microbial Technology*, **2011**, 49, 284-8 | 3.8 | 26 |
| 141 | Enantioselective kinetic resolution of 3-phenyl-2-ketones using Baeyer□Villiger monooxygenases. *Tetrahedron: Asymmetry*, **2007**, 18, 892-895 | | 26 |
| 140 | Family Clustering of Baeyer□Villiger Monooxygenases Based on Protein Sequence and Stereopreference. *Angewandte Chemie*, **2005**, 117, 3675-3679 | 3.6 | 26 |
| 139 | Regioselective Syntheses of 2,3-Substituted Pyridines by Orthogonal Cross-Coupling Strategies. *European Journal of Organic Chemistry*, **2011**, 2011, 1972-1979 | 3.2 | 25 |
| 138 | Encapsulation of recombinant E. coli expressing cyclopentanone monooxygenase in polyelectrolyte complex capsules for Baeyer-Villiger biooxidation of 8-oxabicyclo[3.2.1]oct-6-en-3-one. *Biotechnology Letters*, **2010**, 32, 675-80 | 3 | 25 |
| 137 | Biocatalyst assessment of recombinant whole-cells expressing the Baeyer-Villiger monooxygenase from Xanthobacter sp. ZL5. *Journal of Molecular Catalysis B: Enzymatic*, **2008**, 50, 61-68 | | 25 |
| 136 | Synthesis of Pyridinyl-Pyrimidines via Pd-Catalyzed Cross-Coupling Reactions: A Comparison of Classical Thermal and Microwave Assisted Reaction Conditions. *Synlett*, **2003**, 2003, 1862-1864 | 2.2 | 25 |
| 135 | Microbial Baeyer-Villiger Oxidation of Bicyclo[4.3.0]ketones by Two Recombinant E. coli Strains. A Novel Access to Indole Alkaloids. *Synlett*, **2002**, 2002, 0700-0702 | 2.2 | 25 |
| 134 | Fusion proteins of an enoate reductase and a Baeyer-Villiger monooxygenase facilitate the synthesis of chiral lactones. *Biological Chemistry*, **2017**, 398, 31-37 | 4.5 | 24 |

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| 133 | Biochemical characterization of an ulvan lyase from the marine flavobacterium Formosa agariphila KMM 3901. *Applied Microbiology and Biotechnology*, **2018**, 102, 6987-6996 | 5.7 | 24 |
| 132 | In vitro blood-brain barrier permeability predictions for GABAA receptor modulating piperine analogs. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 103, 118-126 | 5.7 | 24 |
| 131 | Mutagenesis-Independent Stabilization of Class B Flavin Monooxygenases in Operation. *Advanced Synthesis and Catalysis*, **2017**, 359, 2121-2131 | 5.6 | 23 |
| 130 | Manipulating the stereoselectivity of the thermostable Baeyer-Villiger monooxygenase TmCHMO by directed evolution. *Organic and Biomolecular Chemistry*, **2017**, 15, 9824-9829 | 3.9 | 23 |
| 129 | Microbial Baeyer□Villiger oxidation of 4,4-disubstituted cyclohexan- and cyclohexenones by recombinant whole-cells expressing monooxygenases of bacterial origin. *Journal of Molecular Catalysis B: Enzymatic*, **2006**, 39, 135-140 | | 23 |
| 128 | Investigations of the halogen dance reaction on N-substituted 2-thiazolamines. *Journal of Organic Chemistry*, **2005**, 70, 567-74 | 4.2 | 23 |
| 127 | Baeyer-Villiger Oxidation of Bridgedendo-Tricyclic Ketones with EngineeredEscherichia coliExpressing Monooxygenases of Bacterial Origin. *Synlett*, **2005**, 2005, 2751-2754 | 2.2 | 23 |
| 126 | Kinetic Modeling of an Enzymatic Redox Cascade In Vivo Reveals Bottlenecks Caused by Cofactors. *ChemCatChem*, **2017**, 9, 3420-3427 | 5.2 | 22 |
| 125 | Leoligin, the Major Lignan from Edelweiss (Leontopodium nivale subsp. alpinum), Promotes Cholesterol Efflux from THP-1 Macrophages. *Journal of Natural Products*, **2016**, 79, 1651-7 | 4.9 | 22 |
| 124 | In Vivo Synthesis of Polyhydroxylated Compounds from a Hidden Reservoir□of Toxic Aldehyde Species. *ChemCatChem*, **2017**, 9, 2919-2923 | 5.2 | 20 |
| 123 | Asymmetric bioreduction of activated carbon-carbon double bonds using Shewanella yellow enzyme (SYE-4) as novel enoate reductase. *Tetrahedron*, **2012**, 68, 7619-7623 | 2.4 | 20 |
| 122 | Cellular N-myristoyltransferases play a crucial picornavirus genus-specific role in viral assembly, virion maturation, and infectivity. *PLoS Pathogens*, **2018**, 14, e1007203 | 7.6 | 19 |
| 121 | Molecular tools for GABA receptors: High affinity ligands for □-containing subtypes. *Scientific Reports*, **2017**, 7, 5674 | 4.9 | 19 |
| 120 | Non-hazardous Baeyer-Villiger oxidation of levulinic acid derivatives: alternative renewable access to 3-hydroxypropionates. *Chemical Communications*, **2015**, 51, 2874-7 | 5.8 | 19 |
| 119 | Double site saturation mutagenesis of the human cytochrome P450 2D6 results in regioselective steroid hydroxylation. *FEBS Journal*, **2013**, 280, 3094-108 | 5.7 | 19 |
| 118 | Intramolecular Diels□Alder cyclization of biodihydroxylated benzoic acid derivatives towards novel heterocyclic scaffolds. *Monatshefte F□ Chemie*, **2010**, 141, 699-707 | 1.4 | 19 |
| 117 | Random Mutagenesis-Driven Improvement of Carboxylate Reductase Activity using an Amino Benzamidoxime-Mediated High-Throughput Assay. *Advanced Synthesis and Catalysis*, **2019**, 361, 2544 | 5.6 | 18 |
| 116 | Substrate-Independent High-Throughput Assay for the Quantification of Aldehydes. *Advanced Synthesis and Catalysis*, **2019**, 361, 2538 | 5.6 | 18 |

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| 115 | Metal assisted synthesis of mono and diamino substituted pyridines. *Tetrahedron*, **2011**, 67, 4169-4178 | 2.4 | 18 |
| 114 | A guideline for the arylation of positions 4 and 5 of thiazole via Pd-catalyzed cross-coupling reactions. *Tetrahedron*, **2010**, 66, 8051-8059 | 2.4 | 18 |
| 113 | Towards functional selectivity for  GABA receptors: a series of novel pyrazoloquinolinones. *British Journal of Pharmacology*, **2018**, 175, 419-428 | 8.6 | 18 |
| 112 | Biocompatible metal-assisted C-C cross-coupling combined with biocatalytic chiral reductions in a concurrent tandem cascade. *Chemical Communications*, **2018**, 54, 12978-12981 | 5.8 | 18 |
| 111 | Ligand-Assisted Iron Catalysis in the Direct Functionalization of C?H Bonds. *ChemCatChem*, **2014**, 6, 2194-2196 | 5.2 | 17 |
| 110 | Aryl Bromides and Aryl Chlorides for the Direct Arylation of Benzylic Amines Mediated by Ruthenium(II). *European Journal of Organic Chemistry*, **2013**, 2013, 2878-2890 | 3.2 | 17 |
| 109 | Polyarylated Thiazoles via a Combined Halogen Dance Cross-Coupling Strategy. *European Journal of Organic Chemistry*, **2009**, 2009, 3228-3236 | 3.2 | 17 |
| 108 | Synthesis of 5-arylated N-arylthiazole-2-amines as potential skeletal muscle cell differentiation promoters. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 2149-54 | 2.9 | 17 |
| 107 | Easy Access to Enantiopure (S)- and (R)-Aryl Alkyl Alcohols by a Combination of Gold(III)-Catalyzed Alkyne Hydration and Enzymatic Reduction. *ChemCatChem*, **2018**, 10, 920-924 | 5.2 | 16 |
| 106 | Application of continuous flow and alternative energy devices for 5-hydroxymethylfurfural production. *Molecular Diversity*, **2011**, 15, 639-43 | 3.1 | 16 |
| 105 | Stereoselective hybrid catalysts: new opportunities. *Journal of Chemical Technology and Biotechnology*, **2007**, 82, 1067-1071 | 3.5 | 16 |
| 104 | First chemo-enzymatic synthesis of the ()-Taniguchi lactone and substrate profiles of CAMO and OTEMO, two new Baeyer-Villiger monooxygenases. *Monatshefte F Chemie*, **2017**, 148, 157-165 | 1.4 | 15 |
| 103 | Arylation of Pyridines via Suzuki-Miyaura Cross-Coupling and Pyridine-Directed C-H Activation Using a Continuous-Flow Approach. *Synlett*, **2013**, 24, 2411-2418 | 2.2 | 15 |
| 102 | Synthesis of analogs of the phenylamino-pyrimidine type protein kinase C inhibitor CGP 60474 utilizing a Negishi cross-coupling strategy. *Tetrahedron*, **2006**, 62, 2380-2387 | 2.4 | 15 |
| 101 | Drugs from nature targeting inflammation (DNTI): a successful Austrian interdisciplinary network project. *Monatshefte F Chemie*, **2016**, 147, 479-491 | 1.4 | 15 |
| 100 | Enantiocomplementary access to carba-analogs of C-nucleoside derivatives by recombinant Baeyer-Villiger monooxygenases. *Bioorganic and Medicinal Chemistry Letters*, **2013**, 23, 2718-20 | 2.9 | 14 |
| 99 | A Systematic Study of Suzuki-Miyaura Cross-Coupling Reactions on Thiazoleboronic Esters in the 4- and 5-Position. *Synthesis*, **2010**, 2010, 837-843 | 2.9 | 14 |
| 98 | Synthesis and Enantioselective Baeyer-Villiger Oxidation of Prochiral Perhydro-pyranones with Recombinant E. coli Producing Cyclohexanone Monooxygenase. *Synlett*, **2003**, 2003, 1973-1976 | 2.2 | 14 |

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| 97 | First Halogen Dance Reaction on Oxazoles. Synthesis of 4,5-Disubstituted 2-Phenyloxazoles. *Synlett* , **2005**, 2005, 1433-1434 | 2.2 | 14 |
| 96 | Thiophene ring-fragmentation reactions: Principles and scale-up towards NLO materials. *Tetrahedron*, **2017**, 73, 472-480 | 2.4 | 13 |
| 95 | Allosteric GABA Receptor Modulators-A Review on the Most Recent Heterocyclic Chemotypes and Their Synthetic Accessibility. *Molecules*, **2020**, 25, | 4.8 | 13 |
| 94 | Mechanistic and Kinetic Studies of the Direct Alkylation of Benzylic Amines: A Formal C(sp)-H Activation Proceeds Actually via a C(sp)-H Activation Pathway. *ACS Catalysis*, **2015**, 5, 587-595 | 13.1 | 13 |
| 93 | Construction of a xylanase A variant capable of polymerization. *PLoS ONE*, **2011**, 6, e25388 | 3.7 | 13 |
| 92 | Recombinant whole-cell mediated baeyer-villiger oxidation of perhydropyran-type ketones. *Chemistry and Biodiversity*, **2008**, 5, 490-8 | 2.5 | 13 |
| 91 | Synthesis of tetrahydrofuran-based natural products and their carba analogs via stereoselective enzyme mediated Baeyer Villiger oxidation. *Tetrahedron*, **2016**, 72, 7212-7221 | 2.4 | 12 |
| 90 | First selective direct mono-arylation of piperidines using ruthenium-catalyzed C-H activation. *Monatshefte F Chemie*, **2013**, 144, 539-552 | 1.4 | 12 |
| 89 | Synthesis of an antiviral drug precursor from chitin using a saprophyte as a whole-cell catalyst. *Microbial Cell Factories*, **2011**, 10, 102 | 6.4 | 12 |
| 88 | A novel hetero-Diels-Alder approach towards perhydro quinolinones bearing an angular methyl group. *Tetrahedron*, **1998**, 54, 875-894 | 2.4 | 12 |
| 87 | Baker?s yeast-catalyzed synthesis of optically pure 4-tert-butyl-3-hydroxy beta-lactam cis-(3R,4S) and trans-(3R,4R) diastereomers. *Canadian Journal of Chemistry*, **2002**, 80, 796-800 | 0.9 | 12 |
| 86 | An Efficient and Simple Procedure for the Preparation of Keto-lactams. *Journal F Praktische Chemie*, **2000**, 342, 585-590 | | 12 |
| 85 | para-Trifluoromethyl-methcathinone is an allosteric modulator of the serotonin transporter. *Neuropharmacology*, **2019**, 161, 107615 | 5.5 | 11 |
| 84 | Piperine Congeners as Inhibitors of Vascular Smooth Muscle Cell Proliferation. *Planta Medica*, **2015**, 81, 1065-74 | 3.1 | 11 |
| 83 | The steroid monooxygenase from Rhodococcus rhodochrous; a versatile biocatalyst. *Tetrahedron: Asymmetry*, **2013**, 24, 1620-1624 | | 11 |
| 82 | Palladium(II)-Catalyzed Regioselective Ortho Arylation of sp(2) C-H Bonds of N-Aryl-2-amino Pyridine Derivatives. *ChemCatChem*, **2012**, 4, 1345-1352 | 5.2 | 11 |
| 81 | Selective Sequential Cross-Coupling Reactions on Imidazole towards Neurodazine and Analogues. *Synthesis*, **2013**, 45, 1387-1405 | 2.9 | 11 |
| 80 | Synthesis of pyrrolo[2,3-d][1,2,3]thiadiazole-6-carboxylates via the Hurd-Mori reaction. Investigating the effect of the N-protecting group on the cyclization. *Molecules*, **2005**, 10, 367-75 | 4.8 | 11 |

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| 79 | Whole-cell Mediated Baeyer-Villiger Oxidation of Functionalized Bicyclo[3.3.0]ketones by Recombinant E. coli. *Synlett*, **2002**, 2002, 0703-0706 | 2.2 | 11 |
| 78 | Stereochemistry of phase-1 metabolites of mephedrone determines their effectiveness as releasers at the serotonin transporter. *Neuropharmacology*, **2019**, 148, 199-209 | 5.5 | 11 |
| 77 | Biocatalysis in Green and Blue: Cyanobacteria. *Trends in Biotechnology*, **2021**, 39, 875-889 | 15.1 | 11 |
| 76 | Linked magnolol dimer as a selective PPARγ agonist - Structure-based rational design, synthesis, and bioactivity evaluation. *Scientific Reports*, **2017**, 7, 13002 | 4.9 | 10 |
| 75 | Morpholine-based buffers activate aerobic photobiocatalysis spin correlated ion pair formation. *Catalysis Science and Technology*, **2019**, 9, 1365-1371 | 5.5 | 10 |
| 74 | Developing piperine towards TRPV1 and GABAA receptor ligands--synthesis of piperine analogs via Heck-coupling of conjugated dienes. *Organic and Biomolecular Chemistry*, **2015**, 13, 990-4 | 3.9 | 10 |
| 73 | Indium- and Zinc-Mediated Acyloxyallylation of Protected and Unprotected Aldotetroses-Revealing a Pronounced Diastereodivergence and a Fundamental Difference in the Performance of the Mediating Metal. *Journal of Organic Chemistry*, **2018**, 83, 2647-2659 | 4.2 | 10 |
| 72 | Esters of valerenic acid as potential prodrugs. *European Journal of Pharmacology*, **2014**, 735, 123-31 | 5.3 | 10 |
| 71 | Enantiomerenreine Bicyclo[4.2.0]octane durch kupferkatalysierte [2+2]-Photocycloaddition und enantiotopos-differenzierende Ringöffnung. *Angewandte Chemie*, **2006**, 118, 5667-5670 | 3.6 | 10 |
| 70 | Non-hazardous biocatalytic oxidation in Nylon-9 monomer synthesis on a 40 g scale with efficient downstream processing. *Biotechnology and Bioengineering*, **2017**, 114, 1670-1678 | 4.9 | 9 |
| 69 | Boosting photobioredox catalysis by morpholine electron donors under aerobic conditions. *Catalysis Science and Technology*, **2019**, 9, 2682-2688 | 5.5 | 9 |
| 68 | Pd(0)-Catalyzed Cu(I)-Thiophene-2-carboxylate-mediated Cross-Coupling of Heteroaromatic Thioethers and Boronic Acids: First Liebeskind–Srogl Reaction in Water. *Journal of Heterocyclic Chemistry*, **2013**, 50, 1368-1373 | 1.9 | 9 |
| 67 | An improved synthetic approach to thieno[2,3-d]-1,2,3-thiadiazolecarboxylates via diazotization of aminothiophene derivatives. *Journal of Heterocyclic Chemistry*, **1999**, 36, 761-765 | 1.9 | 9 |
| 66 | Methyl glycosides via Fischer glycosylation: translation from batch microwave to continuous flow processing. *Monatshefte Für Chemie*, **2019**, 150, 11-19 | 1.4 | 9 |
| 65 | Regio- and stereoselective synthesis of chiral nitrilolactones using Baeyer–Villiger monooxygenases. *Tetrahedron*, **2016**, 72, 7241-7248 | 2.4 | 8 |
| 64 | VUT-MK142 : a new cardiomyogenic small molecule promoting the differentiation of pre-cardiac mesoderm into cardiomyocytes. *MedChemComm*, **2013**, 4, 1189-1195 | 5 | 8 |
| 63 | Targeting aphA : a new high-throughput screening assay identifies compounds that reduce prime virulence factors of Vibrio cholerae. *Journal of Medical Microbiology*, **2016**, 65, 678-687 | 3.2 | 8 |
| 62 | GABA receptor activity modulating piperine analogs: In vitro metabolic stability, metabolite identification, CYP450 reaction phenotyping, and protein binding. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2018**, 1072, 379-389 | 3.2 | 8 |

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