Chan Beum Park

List of Publications by Year
in descending order

209 papers	14,861 citations	16411 64 h-index	21474 114 g-index
240 all docs	240 docs citations	240 times ranked	18080 citing authors

#	Article	IF	Citations
1	Highly Photoactive, Low Bandgap TiO₂ Nanoparticles Wrapped by Graphene. Advanced Materials, 2012, 24, 1084-1088.	11.1	848
2	Musselâ€Inspired Polydopamine Coating as a Universal Route to Hydroxyapatite Crystallization. Advanced Functional Materials, 2010, 20, 2132-2139.	7.8	683
3	General functionalization route for cell adhesion on non-wetting surfaces. Biomaterials, 2010, 31, 2535-2541.	5.7	617
4	Human endothelial cell growth on mussel-inspired nanofiber scaffold for vascular tissue engineering. Biomaterials, 2010, 31, 9431-9437.	5.7	358
5	Trehalose differentially inhibits aggregation and neurotoxicity of beta-amyloid 40 and 42. Neurobiology of Disease, 2005, 20, 74-81.	2.1	316
6	Photobiocatalysis: Activating Redox Enzymes by Direct or Indirect Transfer of Photoinduced Electrons. Angewandte Chemie - International Edition, 2018, 57, 7958-7985.	7.2	277
7	Biologically inspired pteridine redox centres for rechargeable batteries. Nature Communications, 2014, 5, 5335.	5.8	254
8	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. Angewandte Chemie - International Edition, 2017, 56, 3827-3832.	7.2	231
9	Myoblast differentiation on graphene oxide. Biomaterials, 2013, 34, 2017-2023.	5.7	230
10	Spatial Control of Cell Adhesion and Patterning through Mussel-Inspired Surface Modification by Polydopamine. Langmuir, 2010, 26, 15104-15108.	1.6	226
11	Selfâ€Assembled Lightâ€Harvesting Peptide Nanotubes for Mimicking Natural Photosynthesis. Angewandte Chemie - International Edition, 2012, 51, 517-520.	7.2	213
12	Quinone and its derivatives for energy harvesting and storage materials. Journal of Materials Chemistry A, 2016, 4, 11179-11202.	5.2	211
13	Inhibition of insulin amyloid formation by small stress molecules. FEBS Letters, 2004, 564, 121-125.	1.3	210
14	Organic Nanohybrids for Fast and Sustainable Energy Storage. Advanced Materials, 2014, 26, 2558-2565.	11.1	210
15	Graphene-Based Chemiluminescence Resonance Energy Transfer for Homogeneous Immunoassay. ACS Nano, 2012, 6, 2978-2983.	7.3	208
16	Metal Ions Differentially Influence the Aggregation and Deposition of Alzheimer's Î²-Amyloid on a Solid Template. Biochemistry, 2007, 46, 6118-6125.	1.2	206
17	Carbonâ€Based Nanomaterials for Tissue Engineering. Advanced Healthcare Materials, 2013, 2, 244-260.	3.9	202
18	Synergic effects of nanofiber alignment and electroactivity on myoblast differentiation. Biomaterials, 2012, 33, 6098-6104.	5.7	198

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19	Photonic Carbon Dots as an Emerging Nanoagent for Biomedical and Healthcare Applications. ACS Nano, 2020, 14, 6470-6497.	7.3	186
20	Highâ€Temperature Selfâ€Assembly of Peptides into Vertically Wellâ€Aligned Nanowires by Aniline Vapor. Advanced Materials, 2008, 20, 3754-3758.	11.1	170
21	Grapheneâ€“Biomineral Hybrid Materials. Advanced Materials, 2011, 23, 2009-2014.	11.1	168
22	Metabolizing enzyme toxicology assay chip (MetaChip) for high-throughput microscale toxicity analyses. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 983-987.	3.3	166
23	Betaâ€Sheetâ€Forming, Selfâ€Assembled Peptide Nanomaterials towards Optical, Energy, and Healthcare Applications. Small, 2015, 11, 3623-3640.	5.2	161
24	Synthesis of Diphenylalanine/Cobalt Oxide Hybrid Nanowires and Their Application to Energy Storage. ACS Nano, 2010, 4, 159-164.	7.3	150
25	Rational Design and Engineering of Quantumâ€Dotâ€Sensitized TiO₂ Nanotube Arrays for Artificial Photosynthesis. Advanced Materials, 2011, 23, 1883-1888.	11.1	147
26	Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energyâ€Storage Compound. Angewandte Chemie - International Edition, 2013, 52, 8322-8328.	7.2	147
27	Multi-electron redox phenazine for ready-to-charge organic batteries. Green Chemistry, 2017, 19, 2980-2985.	4.6	139
28	Photoluminescent Peptide Nanotubes. Advanced Materials, 2009, 21, 1577-1581.	11.1	131
29	Clinically accurate diagnosis of Alzheimerâ€™s disease via multiplexed sensing of core biomarkers in human plasma. Nature Communications, 2020, 11, 119.	5.8	130
30	Mineralization of Selfâ€assembled Peptide Nanofibers for Rechargeable Lithium Ion Batteries. Advanced Materials, 2010, 22, 5537-5541.	11.1	127
31	Coupling Photocatalysis and Redox Biocatalysis Toward Biocatalyzed Artificial Photosynthesis. Chemistry - A European Journal, 2013, 19, 4392-4406.	1.7	124
32	Ectoine and hydroxyectoine inhibit aggregation and neurotoxicity of Alzheimer's Î²-amyloid. FEBS Letters, 2005, 579, 4775-4780.	1.3	120
33	High stability of selfâ€assembled peptide nanowires against thermal, chemical, and proteolytic attacks. Biotechnology and Bioengineering, 2010, 105, 221-230.	1.7	118
34	Self-assembled, photoluminescent peptide hydrogel as a versatile platform for enzyme-based optical biosensors. Biosensors and Bioelectronics, 2011, 26, 1860-1865.	5.3	116
35	Nanobiocatalytic assemblies for artificial photosynthesis. Current Opinion in Biotechnology, 2014, 28, 1-9.	3.3	114
36	Mussel-inspired transformation of CaCO3 to bone minerals. Biomaterials, 2010, 31, 6628-6634.	5.7	113

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37	Dopamine-Induced Mineralization of Calcium Carbonate Vaterite Microspheres. Langmuir, 2010, 26, 14730-14736.	1.6	113
38	Polydopamine as a Biomimetic Electron Gate for Artificial Photosynthesis. Angewandte Chemie - International Edition, 2014, 53, 6364-6368.	7.2	113
39	Carbon nanotube-amorphous FePO4 coreâ€“shell nanowires as cathode material for Li ion batteries. Chemical Communications, 2010, 46, 7409.	2.2	107
40	Synthesis of Diphenylalanine/Polyaniline Core/Shell Conducting Nanowires by Peptide Selfâ€Assembly. Angewandte Chemie - International Edition, 2009, 48, 4820-4823.	7.2	102
41	Selfâ€Assembly of Semiconducting Photoluminescent Peptide Nanowires in the Vapor Phase. Angewandte Chemie - International Edition, 2011, 50, 1164-1167.	7.2	94
42	Bioâ€Inspired Synthesis of Minerals for Energy, Environment, and Medicinal Applications. Advanced Functional Materials, 2013, 23, 10-25.	7.8	94
43	Insulin amyloid fibrillation at above 100Â°C: New insights into protein folding under extreme temperatures. Protein Science, 2004, 13, 2429-2436.	3.1	93
44	Eosin Yâ€Sensitized Artificial Photosynthesis by Highly Efficient Visibleâ€Lightâ€Driven Regeneration of Nicotinamide Cofactor. ChemBioChem, 2009, 10, 1621-1624.	1.3	93
45	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. Angewandte Chemie - International Edition, 2018, 57, 10595-10599.	7.2	93
46	Photoexcited Porphyrins as a Strong Suppressor of Î²â€Amyloid Aggregation and Synaptic Toxicity. Angewandte Chemie - International Edition, 2015, 54, 11472-11476.	7.2	92
47	Screening Xanthene Dyes for Visible Lightâ€Driven Nicotinamide Adenine Dinucleotide Regeneration and Photoenzymatic Synthesis. Advanced Synthesis and Catalysis, 2009, 351, 2589-2594.	2.1	91
48	Mussel-inspired functionalization of carbon nanotubes for hydroxyapatite mineralization. Journal of Materials Chemistry, 2010, 20, 8848.	6.7	88
49	Biocatalytic C=C Bond Reduction through Carbon Nanodotâ€Sensitized Regeneration of NADH Analogues. Angewandte Chemie - International Edition, 2018, 57, 13825-13828.	7.2	87
50	Cofactorâ€Free Lightâ€Driven Wholeâ€Cell Cytochrome P450 Catalysis. Angewandte Chemie - International Edition, 2015, 54, 969-973.	7.2	83
51	Unbiased biocatalytic solar-to-chemical conversion by FeOOH/BiVO4/perovskite tandem structure. Nature Communications, 2018, 9, 4208.	5.8	83
52	Aluminum Nanoarrays for Plasmon-Enhanced Light Harvesting. ACS Nano, 2015, 9, 6206-6213.	7.3	82
53	â€œTree to Boneâ€• Lignin/Polycaprolactone Nanofibers for Hydroxyapatite Biomineralization. Biomacromolecules, 2019, 20, 2684-2693.	2.6	82
54	Continuous 3D Titanium Nitride Nanoshell Structure for Solarâ€Driven Unbiased Biocatalytic CO₂ Reduction. Advanced Energy Materials, 2019, 9, 1900029.	10.2	81

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55	Electrochemical Regeneration of NADH Enhanced by Platinum Nanoparticles. Angewandte Chemie - International Edition, 2008, 47, 1749-1752.	7.2	78
56	Photoenzymatic synthesis through sustainable NADH regeneration by SiO2-supported quantum dots. Chemical Communications, 2011, 47, 4643.	2.2	74
57	Cofactorâ€Free, Direct Photoactivation of Enoate Reductases for the Asymmetric Reduction of C=C Bonds. Angewandte Chemie - International Edition, 2017, 56, 8681-8685.	7.2	74
58	Photo-induced inhibition of Alzheimer's Î²-amyloid aggregation inÂvitro by rose bengal. Biomaterials, 2015, 38, 43-49.	5.7	73
59	CdTe, CdSe, and CdS Nanocrystals for Highly Efficient Regeneration of Nicotinamide Cofactor Under Visible Light. Small, 2010, 6, 922-926.	5.2	72
60	Musselâ€Inspired Plasmonic Nanohybrids for Light Harvesting. Advanced Materials, 2014, 26, 4463-4468.	11.1	72
61	Photoactive gâ€C₃N₄ Nanosheets for Lightâ€Induced Suppression of Alzheimer's Î²â€Amyloid Aggregation and Toxicity. Advanced Healthcare Materials, 2016, 5, 1560-1565.	3.9	72
62	Enzymatic photosynthesis of formate from carbon dioxide coupled with highly efficient photoelectrochemical regeneration of nicotinamide cofactors. Green Chemistry, 2016, 18, 5989-5993.	4.6	69
63	Photomodulating Carbon Dots for Spatiotemporal Suppression of Alzheimerâ€™s Î²-Amyloid Aggregation. ACS Nano, 2020, 14, 16973-16983.	7.3	69
64	Surface Plasmon Resonance Analysis of Alzheimer's Î²-Amyloid Aggregation on a Solid Surface:â€‰ From Monomers to Fully-Grown Fibrils. Analytical Chemistry, 2008, 80, 2400-2407.	3.2	67
65	Bio-inspired fabrication of superhydrophobic surfaces through peptide self-assembly. Soft Matter, 2009, 5, 2717.	1.2	66
66	Carbon Nanodotâ€Sensitized Modulation of Alzheimer's Î²â€Amyloid Selfâ€Assembly, Disassembly, and Toxicity. Small, 2017, 13, 1700983.	5.2	66
67	Solar energy in production of l-glutamate through visible light active photocatalystâ€”redox enzyme coupled bioreactor. Chemical Communications, 2008, , 5423.	2.2	65
68	Bone-like peptide/hydroxyapatite nanocomposites assembled with multi-level hierarchical structures. Soft Matter, 2011, 7, 7201.	1.2	65
69	Bio-inspired strategy for on-surface synthesis of silver nanoparticles for metal/organic hybrid nanomaterials and LDI-MS substrates. Nanotechnology, 2011, 22, 494020.	1.3	65
70	Rattleâ€Structured Upconversion Nanoparticles for Nearâ€IRâ€Induced Suppression of Alzheimer's Î²â€Amyloid Aggregation. Small, 2017, 13, 1603139.	5.2	64
71	Self-Assembled Peptide-Carbon Nitride Hydrogel as a Light-Responsive Scaffold Material. Biomacromolecules, 2017, 18, 3551-3556.	2.6	64
72	Carbon Nanotubeâ€“Graphitic Carbon Nitride Hybrid Films for Flavoenzymeâ€Catalyzed Photoelectrochemical Cells. Advanced Functional Materials, 2018, 28, 1705232.	7.8	64

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73	Cascading g-C₃N₄ and Peroxygenases for Selective Oxyfunctionalization Reactions. ACS Catalysis, 2019, 9, 7409-7417.	5.5	64
74	Zn-containing porphyrin as a biomimetic light-harvesting molecule for biocatalyzed artificial photosynthesis. Chemical Communications, 2011, 47, 10227.	2.2	63
75	Shedding Light on Alzheimerâ€™s Î²-Amyloidosis: Photosensitized Methylene Blue Inhibits Self-Assembly of Î²-Amyloid Peptides and Disintegrates Their Aggregates. Scientific Reports, 2017, 7, 7523.	1.6	62
76	Expanding the Spectrum of Light-Driven Peroxygenase Reactions. ACS Catalysis, 2019, 9, 890-894.	5.5	62
77	Photosensitizing materials and platforms for light-triggered modulation of Alzheimer's Î²-amyloid self-assembly. Biomaterials, 2019, 190-191, 121-132.	5.7	62
78	NADH-Free Electroenzymatic Reduction of CO₂ by Conductive Hydrogel-Conjugated Formate Dehydrogenase. ACS Catalysis, 2019, 9, 5584-5589.	5.5	60
79	Multifunctional carbon dots as a therapeutic nanoagent for modulating Cu(<scp>ii</scp>)-mediated Î²-amyloid aggregation. Nanoscale, 2019, 11, 6297-6306.	2.8	59
80	Rupture of the Cell Envelope by Decompression of the Deep-Sea Methanogen Methanococcus jannaschii. Applied and Environmental Microbiology, 2002, 68, 1458-1463.	1.4	56
81	Solid-Phase Growth of Nanostructures from Amorphous Peptide Thin Film: Effect of Water Activity and Temperature. Chemistry of Materials, 2008, 20, 4284-4290.	3.2	56
82	Chemical sensing platforms for detecting trace-level Alzheimer's core biomarkers. Chemical Society Reviews, 2020, 49, 5446-5472.	18.7	56
83	Photoelectroenzymatic Oxyfunctionalization on Flavin-Hybridized Carbon Nanotube Electrode Platform. ACS Catalysis, 2017, 7, 1563-1567.	5.5	55
84	Light-triggered dissociation of self-assembled Î²-amyloid aggregates into small, nontoxic fragments by ruthenium (II) complex. Acta Biomaterialia, 2018, 67, 147-155.	4.1	55
85	â€œWaste to Wealthâ€• Lignin as a Renewable Building Block for Energy Harvesting/Storage and Environmental Remediation. ChemSusChem, 2020, 13, 2807-2827.	3.6	55
86	Nicotinamide adenine dinucleotide as a photocatalyst. Science Advances, 2019, 5, eaax0501.	4.7	54
87	Synthesis of graphene-wrapped CuO hybrid materials by CO2 mineralization. Green Chemistry, 2012, 14, 2391.	4.6	53
88	Selfâ€Assembly of Metalloporphyrins into Lightâ€Harvesting Peptide Nanofiber Hydrogels for Solar Water Oxidation. Small, 2014, 10, 1272-1277.	5.2	53
89	Extremely Stable Luminescent Crosslinked Perovskite Nanoparticles under Harsh Environments over 1.5 Years. Advanced Materials, 2021, 33, e2005255.	11.1	53
90	Visible Lightâ€Driven NADH Regeneration Sensitized by Proflavine for Biocatalysis. ChemBioChem, 2012, 13, 1278-1282.	1.3	52

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91	Gold Nanoparticle Enlargement Coupled with Fluorescence Quenching for Highly Sensitive Detection of Analytes. Langmuir, 2009, 25, 13302-13305.	1.6	51
92	Photobiokatalyse: Aktivierung von Redoxenzymen durch direkten oder indirekten Transfer photoinduzierter Elektronen. Angewandte Chemie, 2018, 130, 8086-8116.	1.6	51
93	Inhibition of Î²-amyloid peptide aggregation and neurotoxicity by Î±-d-mannosylglycerate, a natural extremolyte. Peptides, 2008, 29, 578-584.	1.2	50
94	Cytochrome P450â€catalyzed Oâ€dealkylation coupled with photochemical NADPH regeneration. Biotechnology and Bioengineering, 2013, 110, 383-390.	1.7	50
95	Synthesis of Ni-based co-catalyst functionalized W:BiVO₄ nanofibers for solar water oxidation. Green Chemistry, 2016, 18, 944-950.	4.6	50
96	Piezobiocatalysis: Ultrasound-Driven Enzymatic Oxyfunctionalization of Câ€“H Bonds. ACS Catalysis, 2020, 10, 5236-5242.	5.5	50
97	Amorphous Carbon Nitride as a Robust Photocatalyst for Biocatalytic Solar-to-Chemical Conversion. ACS Sustainable Chemistry and Engineering, 2019, 7, 2545-2552.	3.2	49
98	Shedding light on biocatalysis: photoelectrochemical platforms for solar-driven biotransformation. Current Opinion in Chemical Biology, 2019, 49, 122-129.	2.8	49
99	Small stress molecules inhibit aggregation and neurotoxicity of prion peptide 106â€“126. Biochemical and Biophysical Research Communications, 2008, 365, 808-813.	1.0	48
100	A microfluidic system incorporated with peptide/Pd nanowires for heterogeneous catalytic reactions. Lab on A Chip, 2011, 11, 378-380.	3.1	47
101	Piezoelectric materials for ultrasound-driven dissociation of Alzheimer's Î²-amyloid aggregate structure. Biomaterials, 2020, 255, 120165.	5.7	47
102	Biomimetic Artificial Photosynthesis by Lightâ€Harvesting Synthetic Wood. ChemSusChem, 2011, 4, 581-586.	3.6	45
103	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. Angewandte Chemie, 2017, 129, 3885-3890.	1.6	44
104	Biocatalytic Photosynthesis with Water as an Electron Donor. Chemistry - A European Journal, 2014, 20, 12020-12025.	1.7	42
105	Sunlight-assisted, biocatalytic formate synthesis from CO₂ and water using silicon-based photoelectrochemical cells. Chemical Communications, 2016, 52, 9723-9726.	2.2	42
106	Artificial photosynthesis on a chip: microfluidic cofactor regeneration and photoenzymatic synthesis under visible light. Lab on A Chip, 2011, 11, 2309.	3.1	40
107	Bias-Free In Situ H₂O₂ Generation in a Photovoltaic-Photoelectrochemical Tandem Cell for Biocatalytic Oxyfunctionalization. ACS Catalysis, 2019, 9, 10562-10566.	5.5	40
108	Lignin as a multifunctional photocatalyst for solar-powered biocatalytic oxyfunctionalization of Câ€“H bonds. , 2022, 1, 217-226.		40

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109	Human Urineâ€Fueled Lightâ€Driven NADH Regeneration for Redox Biocatalysis. ChemSusChem, 2016, 9, 1559-1564.	3.6	39
110	Solventâ€Free Photobiocatalytic Hydroxylation of Cyclohexane. ChemCatChem, 2020, 12, 4009-4013.	1.8	39
111	Electrochemical Regeneration of NADH Using Conductive Vanadia-Silica Xerogels. Biotechnology Progress, 2007, 23, 293-296.	1.3	38
112	High-Throughput Analysis of Alzheimerâ€™s Î²-Amyloid Aggregation Using a Microfluidic Self-Assembly of Monomersf. Analytical Chemistry, 2009, 81, 2751-2759.	3.2	38
113	Light-Harvesting Dyeâ€“Alginate Hydrogel for Solar-Driven, Sustainable Biocatalysis of Asymmetric Hydrogenation. ACS Sustainable Chemistry and Engineering, 2019, 7, 5632-5637.	3.2	38
114	Silica-coated alginate beads for in vitro protein synthesis via transcription/translation machinery encapsulation. Journal of Biotechnology, 2009, 143, 183-189.	1.9	35
115	Selective Detection of Neurotoxin by Photoluminescent Peptide Nanotubes. Small, 2011, 7, 718-722.	5.2	35
116	Grapheneâ€“Rh-complex hydrogels for boosting redox biocatalysis. Journal of Materials Chemistry A, 2013, 1, 1040-1044.	5.2	35
117	Crystalline IrO2-decorated TiO2 nanofiber scaffolds for robust and sustainable solar water oxidation. Journal of Materials Chemistry A, 2014, 2, 5610.	5.2	34
118	Photoactive Bismuth Vanadate Structure for Lightâ€Triggered Dissociation of Alzheimer's Î²â€Amyloid Aggregates. Advanced Functional Materials, 2018, 28, 1802813.	7.8	34
119	Template-directed self-assembly and growth of insulin amyloid fibrils. Biotechnology and Bioengineering, 2005, 90, 848-855.	1.7	33
120	Bio-inspired mineralization of CO2 gas to hollow CaCO3 microspheres and bone hydroxyapatite/polymer composites. Journal of Materials Chemistry, 2011, 21, 11070.	6.7	33
121	Bi-functional RuO2â€“Co3O4 coreâ€“shell nanofibers as a multi-component one-dimensional water oxidation catalyst. Chemical Communications, 2013, 49, 9725.	2.2	33
122	Synthesis of visible light-active CeO₂sheets via mussel-inspired CaCO₃mineralization. Journal of Materials Chemistry A, 2013, 1, 241-245.	5.2	32
123	Selfâ€Assembled Protective Layer by Symmetric Ionic Liquid for Longâ€Cycling Lithiumâ€“Metal Batteries. Advanced Energy Materials, 2022, 12, .	10.2	32
124	Microfluidic Self-Assembly of Insulin Monomers into Amyloid Fibrils on a Solid Surface. Langmuir, 2008, 24, 7068-7071.	1.6	29
125	Combined Effect of Musselâ€Inspired Surface Modification and Topographical Cues on the Behavior of Skeletal Myoblasts. Advanced Healthcare Materials, 2013, 2, 1445-1450.	3.9	29
126	Cofactorâ€Free, Direct Photoactivation of Enoate Reductases for the Asymmetric Reduction of C=C Bonds. Angewandte Chemie, 2017, 129, 8807-8811.	1.6	29

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127	Ex Situ Atomic Force Microscopy Analysis of Î²-Amyloid Self-Assembly and Deposition on a Synthetic Template. Langmuir, 2006, 22, 6977-6985.	1.6	28
128	Grapheneâ€Oxideâ€Based Immunosensing through Fluorescence Quenching by Peroxidaseâ€Catalyzed Polymerization. Small, 2012, 8, 1994-1999.	5.2	28
129	Robust FeOOH/BiVO₄/Cu(In, Ga)Se₂ tandem structure for solar-powered biocatalytic CO₂ reduction. Journal of Materials Chemistry A, 2020, 8, 8496-8502.	5.2	28
130	Thioflavin Tâ€Amyloid Hybrid Nanostructure for Biocatalytic Photosynthesis. Small, 2018, 14, e1801396.	5.2	27
131	CO₂â€Reductive, Copper Oxideâ€Based Photobiocathode for Zâ€Scheme Semiâ€Artificial Leaf Structure. ChemSusChem, 2020, 13, 2940-2944.	3.6	27
132	Silicon Nanowire Photocathodes for Lightâ€Driven Electroenzymatic Synthesis. ChemSusChem, 2014, 7, 3007-3011.	3.6	26
133	Carboxymethyl cellulose-templated synthesis of hierarchically structured metal oxides. Green Chemistry, 2015, 17, 4167-4172.	4.6	26
134	Solarâ€Assisted eBiorefinery: Photoelectrochemical Pairing of Oxyfunctionalization and Hydrogenation Reactions. Angewandte Chemie - International Edition, 2020, 59, 15886-15890.	7.2	26
135	Protein Micropatterning on Bifunctional Organicâ€“Inorganic Solâ€“Gel Hybrid Materials. Langmuir, 2007, 23, 4732-4736.	1.6	25
136	In situ growth of gold nanoparticles by enzymatic glucose oxidation within alginate gel matrix. Biotechnology and Bioengineering, 2010, 105, 210-214.	1.7	25
137	Nearâ€Infraredâ€Lightâ€Driven Artificial Photosynthesis by Nanobiocatalytic Assemblies. Chemistry - A European Journal, 2014, 20, 3584-3588.	1.7	25
138	Near-Infrared-Active Copper Bismuth Oxide Electrodes for Targeted Dissociation of Alzheimerâ€™s Î²-Amyloid Aggregates. ACS Applied Materials & Interfaces, 2020, 12, 23667-23676.	4.0	25
139	New Platform for Cytochrome P450 Reaction Combining in Situ Immobilization on Biopolymer. Bioconjugate Chemistry, 2014, 25, 2101-2104.	1.8	24
140	A hematite-based photoelectrochemical platform for visible light-induced biosensing. Journal of Materials Chemistry B, 2015, 3, 4483-4486.	2.9	24
141	Lignin-fueled photoelectrochemical platform for light-driven redox biotransformation. Green Chemistry, 2020, 22, 5151-5160.	4.6	24
142	Silica Nanodepletors: Targeting and Clearing Alzheimer's Î²â€Amyloid Plaques. Advanced Functional Materials, 2020, 30, 1910475.	7.8	24
143	Water oxidation-coupled, photoelectrochemical redox biocatalysis toward mimicking natural photosynthesis. Applied Catalysis B: Environmental, 2016, 198, 311-317.	10.8	23
144	Interference of Solvatochromic Twist in Amyloid Nanostructure for Light-Driven Biocatalysis. ACS Applied Energy Materials, 2020, 3, 1215-1221.	2.5	23

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145	Femtomolar sensing of Alzheimer's tau proteins by water oxidation-coupled photoelectrochemical platform. Biosensors and Bioelectronics, 2020, 154, 112075.	5.3	23
146	Constant-volume fed-batch operation for high density cultivation of hyperthermophilic aerobes. Biotechnology Letters, 1997, 11, 277-281.	0.5	22
147	Biocatalyzed Artificial Photosynthesis by Hydrogenâ€Terminated Silicon Nanowires. ChemSusChem, 2012, 5, 2129-2132.	3.6	22
148	Serum-stable quantum dot--protein hybrid nanocapsules for optical bio-imaging. Nanotechnology, 2014, 25, 175702.	1.3	22
149	Highly Accelerated Self-Assembly and Fibrillation of Prion Peptides on Solid Surfaces. Langmuir, 2008, 24, 13822-13827.	1.6	20
150	Microfluidic dissociation and clearance of Alzheimerâ€™s Î²-amyloid aggregates. Biomaterials, 2010, 31, 6789-6795.	5.7	20
151	Self-adhesive graphene oxide-wrapped TiO2 nanoparticles for UV-activated colorimetric oxygen detection. Sensors and Actuators B: Chemical, 2015, 213, 322-328.	4.0	20
152	Biocatalytic C=C Bond Reduction through Carbon Nanodotâ€Sensitized Regeneration of NADH Analogues. Angewandte Chemie, 2018, 130, 14021-14024.	1.6	20
153	Biological Nicotinamide Cofactor as a Redoxâ€Active Motif for Reversible Electrochemical Energy Storage. Angewandte Chemie - International Edition, 2019, 58, 16764-16769.	7.2	19
154	Chemical and mechanistic analysis of photodynamic inhibition of Alzheimer's Î²-amyloid aggregation. Chemical Communications, 2019, 55, 1152-1155.	2.2	19
155	Solar-driven biocatalytic C-hydroxylation through direct transfer of photoinduced electrons. Green Chemistry, 2019, 21, 515-525.	4.6	19
156	Near-Infrared-Active Copper Molybdenum Sulfide Nanocubes for Phonon-Mediated Clearance of Alzheimerâ€™s Î²-Amyloid Aggregates. ACS Applied Materials & Interfaces, 2021, 13, 18581-18593.	4.0	19
157	Solarâ€Powered Wholeâ€Cell P450 Catalytic Platform for Câ€Hydroxylation Reactions. ChemSusChem, 2021, 14, 3054-3058.	3.6	18
158	Heat-fueled enzymatic cascade for selective oxyfunctionalization of hydrocarbons. Nature Communications, 2022, 13, .	5.8	17
159	Coenzyme analogs: excellent substitutes (not poor imitations) for electrochemical regeneration. Chemical Communications, 2011, 47, 12538.	2.2	16
160	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. Angewandte Chemie, 2018, 130, 10755-10759.	1.6	16
161	Unbiased Photoelectrode Interfaces for Solar Coupling of Lignin Oxidation with Biocatalytic Câ•C Bond Hydrogenation. ACS Applied Materials & Interfaces, 2022, 14, 11465-11473.	4.0	16
162	Artificial Electron Carriers for Photoenzymatic Synthesis under Visible Light. Chemistry - A European Journal, 2012, 18, 5490-5495.	1.7	15

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163	Cooperative Conformational Change of a Single Organic Molecule for Ultrafast Rechargeable Batteries. ACS Energy Letters, 2021, 6, 1659-1669.	8.8	15
164	Pressure affects transcription profiles of Methanocaldococcus jannaschii despite the absence of barophilic growth under gas-transfer limitation. Environmental Microbiology, 2006, 8, 2031-2035.	1.8	14
165	Solar-to-chemical conversion platform by Robust Cytochrome P450-P(3HB) complex. Journal of Industrial and Engineering Chemistry, 2016, 33, 28-32.	2.9	14
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