Chan Beum Park

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58 11,755 211 101 h-index g-index citations papers 6.91 13,388 10.4 240 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
211	Lignin as a multifunctional photocatalyst for solar-powered biocatalytic oxyfunctionalization of CH bonds 2022 , 1, 217-226		6
210	Magnetoelectric dissociation of Alzheimer ⊞myloid aggregates Science Advances, 2022, 8, eabn1675	14.3	1
209	Lignin-Induced CaCO Vaterite Structure for Biocatalytic Artificial Photosynthesis. <i>ACS Applied Materials & Amp; Interfaces</i> , 2021 ,	9.5	1
208	Cooperative Conformational Change of a Single Organic Molecule for Ultrafast Rechargeable Batteries. <i>ACS Energy Letters</i> , 2021 , 6, 1659-1669	20.1	5
207	Near-Infrared-Active Copper Molybdenum Sulfide Nanocubes for Phonon-Mediated Clearance of Alzheimer EAmyloid Aggregates. <i>ACS Applied Materials & Description</i> (1988) 18581-18593	9.5	5
206	Solar-Powered Whole-Cell P450 Catalytic Platform for C-Hydroxylation Reactions. <i>ChemSusChem</i> , 2021 , 14, 3054-3058	8.3	2
205	Solar-Powered Whole-Cell P450 Catalytic Platform for C-Hydroxylation Reactions. <i>ChemSusChem</i> , 2021 , 14, 3030	8.3	
204	Extremely Stable Luminescent Crosslinked Perovskite Nanoparticles under Harsh Environments over 1.5 Years. <i>Advanced Materials</i> , 2021 , 33, e2005255	24	26
203	Perovskite Nanoparticles: Extremely Stable Luminescent Crosslinked Perovskite Nanoparticles under Harsh Environments over 1.5 Years (Adv. Mater. 3/2021). <i>Advanced Materials</i> , 2021 , 33, 2170017	24	
202	Near-Infrared-Active Copper Bismuth Oxide Electrodes for Targeted Dissociation of Alzheimer EAmyloid Aggregates. ACS Applied Materials & Interfaces, 2020, 12, 23667-23676	9.5	9
201	Solar-Assisted eBiorefinery: Photoelectrochemical Pairing of Oxyfunctionalization and Hydrogenation Reactions. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 15886-15890	16.4	10
200	Piezoelectric materials for ultrasound-driven dissociation of Alzheimer Emyloid aggregate structure. <i>Biomaterials</i> , 2020 , 255, 120165	15.6	21
199	Solar-Assisted eBiorefinery: Photoelectrochemical Pairing of Oxyfunctionalization and Hydrogenation Reactions. <i>Angewandte Chemie</i> , 2020 , 132, 16020-16024	3.6	3
198	"Waste to Wealth": Lignin as a Renewable Building Block for Energy Harvesting/Storage and Environmental Remediation. <i>ChemSusChem</i> , 2020 , 13, 2807-2827	8.3	25
197	CO -Reductive, Copper Oxide-Based Photobiocathode for Z-Scheme Semi-Artificial Leaf Structure. <i>ChemSusChem</i> , 2020 , 13, 2940-2944	8.3	10
196	Piezobiocatalysis: Ultrasound-Driven Enzymatic Oxyfunctionalization of Cℍ Bonds. <i>ACS Catalysis</i> , 2020 , 10, 5236-5242	13.1	26
195	Lignin-fueled photoelectrochemical platform for light-driven redox biotransformation. <i>Green Chemistry</i> , 2020 , 22, 5151-5160	10	7

(2019-2020)

194	Chemical sensing platforms for detecting trace-level Alzheimer's core biomarkers. <i>Chemical Society Reviews</i> , 2020 , 49, 5446-5472	58.5	25	
193	Silica Nanodepletors: Targeting and Clearing Alzheimer EAmyloid Plaques. <i>Advanced Functional Materials</i> , 2020 , 30, 1910475	15.6	15	
192	Interference of Solvatochromic Twist in Amyloid Nanostructure for Light-Driven Biocatalysis. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1215-1221	6.1	10	
191	Solution-Processed, Photo-Patternable Fluorinated Sol © el Hybrid Materials as a Bio-Fluidic Barrier for Flexible Electronic Systems. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901065	6.4	4	
190	Femtomolar sensing of Alzheimer's tau proteins by water oxidation-coupled photoelectrochemical platform. <i>Biosensors and Bioelectronics</i> , 2020 , 154, 112075	11.8	12	
189	Solvent-Free Photobiocatalytic Hydroxylation of Cyclohexane. <i>ChemCatChem</i> , 2020 , 12, 4009-4013	5.2	21	
188	Photonic Carbon Dots as an Emerging Nanoagent for Biomedical and Healthcare Applications. <i>ACS Nano</i> , 2020 , 14, 6470-6497	16.7	82	
187	Clinically accurate diagnosis of Alzheimer's disease via multiplexed sensing of core biomarkers in human plasma. <i>Nature Communications</i> , 2020 , 11, 119	17.4	51	
186	Photomodulating Carbon Dots for Spatiotemporal Suppression of Alzheimer EAmyloid Aggregation. ACS Nano, 2020,	16.7	24	
185	Metallic Woodpile Nanostructures for Femtomolar Sensing of Alzheimer's Neurofilament Lights. <i>ACS Nano</i> , 2020 , 14, 10376-10384	16.7	5	
184	Titelbild: Solar-Assisted eBiorefinery: Photoelectrochemical Pairing of Oxyfunctionalization and Hydrogenation Reactions (Angew. Chem. 37/2020). <i>Angewandte Chemie</i> , 2020 , 132, 15897-15897	3.6		
183	Robust FeOOH/BiVO4/Cu(In, Ga)Se2 tandem structure for solar-powered biocatalytic CO2 reduction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 8496-8502	13	12	
182	Chemical and mechanistic analysis of photodynamic inhibition of Alzheimer Emyloid aggregation. <i>Chemical Communications</i> , 2019 , 55, 1152-1155	5.8	11	
181	Solar-driven biocatalytic C-hydroxylation through direct transfer of photoinduced electrons. <i>Green Chemistry</i> , 2019 , 21, 515-525	10	11	
180	"Tree to Bone": Lignin/Polycaprolactone Nanofibers for Hydroxyapatite Biomineralization. <i>Biomacromolecules</i> , 2019 , 20, 2684-2693	6.9	40	
179	NADH-Free Electroenzymatic Reduction of CO2 by Conductive Hydrogel-Conjugated Formate Dehydrogenase. <i>ACS Catalysis</i> , 2019 , 9, 5584-5589	13.1	32	
178	Continuous 3D Titanium Nitride Nanoshell Structure for Solar-Driven Unbiased Biocatalytic CO2 Reduction. <i>Advanced Energy Materials</i> , 2019 , 9, 1900029	21.8	54	
177	Light-Harvesting DyeAlginate Hydrogel for Solar-Driven, Sustainable Biocatalysis of Asymmetric Hydrogenation. ACS Sustainable Chemistry and Engineering, 2019, 7, 5632-5637	8.3	29	

176	Multifunctional carbon dots as a therapeutic nanoagent for modulating Cu(ii)-mediated 日 myloid aggregation. <i>Nanoscale</i> , 2019 , 11, 6297-6306	7.7	31
175	Siloxane-Encapsulated Upconversion Nanoparticle Hybrid Composite with Highly Stable Photoluminescence against Heat and Moisture. <i>ACS Applied Materials & Diverfaces</i> , 2019 , 11, 15952	:-7 5 95	9 ⁵
174	Cascading g-C3N4 and Peroxygenases for Selective Oxyfunctionalization Reactions. <i>ACS Catalysis</i> , 2019 , 9, 7409-7417	13.1	37
173	Nicotinamide adenine dinucleotide as a photocatalyst. <i>Science Advances</i> , 2019 , 5, eaax0501	14.3	30
172	Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16764-16769	16.4	11
171	Biological Nicotinamide Cofactor as a Redox-Active Motif for Reversible Electrochemical Energy Storage. <i>Angewandte Chemie</i> , 2019 , 131, 16920-16925	3.6	1
170	Bias-Free In Situ H2O2 Generation in a Photovoltaic-Photoelectrochemical Tandem Cell for Biocatalytic Oxyfunctionalization. <i>ACS Catalysis</i> , 2019 , 9, 10562-10566	13.1	24
169	Amorphous Carbon Nitride as a Robust Photocatalyst for Biocatalytic Solar-to-Chemical Conversion. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 2545-2552	8.3	28
168	Expanding the Spectrum of Light-Driven Peroxygenase Reactions. ACS Catalysis, 2019, 9, 890-894	13.1	45
167	Shedding light on biocatalysis: photoelectrochemical platforms for solar-driven biotransformation. <i>Current Opinion in Chemical Biology</i> , 2019 , 49, 122-129	9.7	35
166	Photosensitizing materials and platforms for light-triggered modulation of Alzheimer Emmyloid self-assembly. <i>Biomaterials</i> , 2019 , 190-191, 121-132	15.6	36
165	Biocatalytic C=C Bond Reduction through Carbon Nanodot-Sensitized Regeneration of NADH Analogues. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13825-13828	16.4	60
164	Photoactive Bismuth Vanadate Structure for Light-Triggered Dissociation of Alzheimer EAmyloid Aggregates. <i>Advanced Functional Materials</i> , 2018 , 28, 1802813	15.6	19
163	Biocatalytic C=C Bond Reduction through Carbon Nanodot-Sensitized Regeneration of NADH Analogues. <i>Angewandte Chemie</i> , 2018 , 130, 14021-14024	3.6	14
162	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. <i>Angewandte Chemie</i> , 2018 , 130, 10755-10759	3.6	14
161	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. Angewandte Chemie - International Edition, 2018, 57, 10595-10599	16.4	69
160	Photoelectrochemical Cells: Carbon Nanotubell raphitic Carbon Nitride Hybrid Films for Flavoenzyme-Catalyzed Photoelectrochemical Cells (Adv. Funct. Mater. 24/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870164	15.6	1
159	Photobiocatalysis: Activating Redox Enzymes by Direct or Indirect Transfer of Photoinduced Electrons. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7958-7985	16.4	174

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158	Light-triggered dissociation of self-assembled Emyloid aggregates into small, nontoxic fragments by ruthenium (II) complex. <i>Acta Biomaterialia</i> , 2018 , 67, 147-155	10.8	28
157	Photobiokatalyse: Aktivierung von Redoxenzymen durch direkten oder indirekten Transfer photoinduzierter Elektronen. <i>Angewandte Chemie</i> , 2018 , 130, 8086-8116	3.6	38
156	Carbon Nanotube G raphitic Carbon Nitride Hybrid Films for Flavoenzyme-Catalyzed Photoelectrochemical Cells. <i>Advanced Functional Materials</i> , 2018 , 28, 1705232	15.6	48
155	Alzheimer's Disease: Photoactive Bismuth Vanadate Structure for Light-Triggered Dissociation of Alzheimer's EAmyloid Aggregates (Adv. Funct. Mater. 41/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870298	15.6	3
154	Unbiased biocatalytic solar-to-chemical conversion by FeOOH/BiVO/perovskite tandem structure. <i>Nature Communications</i> , 2018 , 9, 4208	17.4	58
153	Raktitelbild: Biocatalytic C=C Bond Reduction through Carbon Nanodot-Sensitized Regeneration of NADH Analogues (Angew. Chem. 42/2018). <i>Angewandte Chemie</i> , 2018 , 130, 14132-14132	3.6	
152	Thioflavin T-Amyloid Hybrid Nanostructure for Biocatalytic Photosynthesis. Small, 2018, 14, e1801396	11	13
151	Cellulose-Templated, Dual-Carbonized Na3V2(PO4)3 for Energy Storage with High Rate Capability. <i>ChemElectroChem</i> , 2018 , 5, 2186-2191	4.3	6
150	Rattle-Structured Upconversion Nanoparticles for Near-IR-Induced Suppression of Alzheimer EAmyloid Aggregation. <i>Small</i> , 2017 , 13, 1603139	11	41
149	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. <i>Angewandte Chemie</i> , 2017 , 129, 3885-3890	3.6	36
148	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 3827-3832	16.4	157
147	Photoelectroenzymatic Oxyfunctionalization on Flavin-Hybridized Carbon Nanotube Electrode Platform. <i>ACS Catalysis</i> , 2017 , 7, 1563-1567	13.1	44
146	Catecholamine-functionalized graphene as a biomimetic redox shuttle for solar water oxidation. <i>Faraday Discussions</i> , 2017 , 198, 135-145	3.6	3
145	Hematite-Based Photoelectrode Materials for Photoelectrocatalytic Inhibition of Alzheimer EAmyloid Self-Assembly. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1601133	10.1	7
144	Multi-electron redox phenazine for ready-to-charge organic batteries. <i>Green Chemistry</i> , 2017 , 19, 2980-	2 9 85	84
143	Nature-Inspired Synthesis of Nanostructured Electrocatalysts through Mineralization of Calcium Carbonate. <i>ChemSusChem</i> , 2017 , 10, 2585-2591	8.3	8
142	Cofactor-Free, Direct Photoactivation of Enoate Reductases for the Asymmetric Reduction of C=C Bonds. <i>Angewandte Chemie</i> , 2017 , 129, 8807-8811	3.6	26
141	Cofactor-Free, Direct Photoactivation of Enoate Reductases for the Asymmetric Reduction of C=C Bonds. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 8681-8685	16.4	61

140	Titelbild: Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade (Angew. Chem. 14/2017). <i>Angewandte Chemie</i> , 2017 , 129, 3779-3779	3.6	2
139	Self-Assembled Peptide-Carbon Nitride Hydrogel as a Light-Responsive Scaffold Material. <i>Biomacromolecules</i> , 2017 , 18, 3551-3556	6.9	47
138	Shedding Light on Alzheimer Amyloidosis: Photosensitized Methylene Blue Inhibits Self-Assembly of Amyloid Peptides and Disintegrates Their Aggregates. <i>Scientific Reports</i> , 2017 , 7, 7523	4.9	38
137	Carbon Nanodot-Sensitized Modulation of Alzheimer EAmyloid Self-Assembly, Disassembly, and Toxicity. <i>Small</i> , 2017 , 13, 1700983	11	45
136	Synthesis of Ni-based co-catalyst functionalized W:BiVO4 nanofibers for solar water oxidation. <i>Green Chemistry</i> , 2016 , 18, 944-950	10	42
135	Alzheimer Therapy: Photoactive g-C3N4 Nanosheets for Light-Induced Suppression of Alzheimer EAmyloid Aggregation and Toxicity (Adv. Healthcare Mater. 13/2016). <i>Advanced Healthcare Materials</i> , 2016 , 5, 1526-1526	10.1	2
134	Sunlight-assisted, biocatalytic formate synthesis from CO2 and water using silicon-based photoelectrochemical cells. <i>Chemical Communications</i> , 2016 , 52, 9723-6	5.8	33
133	Quinone and its derivatives for energy harvesting and storage materials. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11179-11202	13	154
132	Water oxidation-coupled, photoelectrochemical redox biocatalysis toward mimicking natural photosynthesis. <i>Applied Catalysis B: Environmental</i> , 2016 , 198, 311-317	21.8	18
131	Human Urine-Fueled Light-Driven NADH Regeneration for Redox Biocatalysis. <i>ChemSusChem</i> , 2016 , 9, 1559-64	8.3	29
130	Photoactive g-C3 N4 Nanosheets for Light-Induced Suppression of Alzheimer & EAmyloid Aggregation and Toxicity. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1560-5	10.1	54
129	Solar-to-chemical conversion platform by Robust Cytochrome P450-P(3HB) complex. <i>Journal of Industrial and Engineering Chemistry</i> , 2016 , 33, 28-32	6.3	10
128	Enzymatic photosynthesis of formate from carbon dioxide coupled with highly efficient photoelectrochemical regeneration of nicotinamide cofactors. <i>Green Chemistry</i> , 2016 , 18, 5989-5993	10	56
127	Carboxymethyl cellulose-templated synthesis of hierarchically structured metal oxides. <i>Green Chemistry</i> , 2015 , 17, 4167-4172	10	21
126	Self-adhesive graphene oxide-wrapped TiO2 nanoparticles for UV-activated colorimetric oxygen detection. <i>Sensors and Actuators B: Chemical</i> , 2015 , 213, 322-328	8.5	15
125	Cofactor-Free Light-Driven Whole-Cell Cytochrome P450 Catalysis. <i>Angewandte Chemie</i> , 2015 , 127, 983	3-9867	24
124	Cofactor-free light-driven whole-cell cytochrome P450 catalysis. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 969-73	16.4	67
123	Photo-induced inhibition of Alzheimer Emmyloid aggregation in vitro by rose bengal. <i>Biomaterials</i> , 2015 , 38, 43-9	15.6	55

(2014-2015)

122	REktitelbild: Cofactor-Free Light-Driven Whole-Cell Cytochrome P450 Catalysis (Angew. Chem. 3/2015). <i>Angewandte Chemie</i> , 2015 , 127, 1056-1056	3.6	
121	Titelbild: Photoexcited Porphyrins as a Strong Suppressor of EAmyloid Aggregation and Synaptic Toxicity (Angew. Chem. 39/2015). <i>Angewandte Chemie</i> , 2015 , 127, 11445-11445	3.6	
120	Photoexcited Porphyrins as a Strong Suppressor of EAmyloid Aggregation and Synaptic Toxicity. <i>Angewandte Chemie</i> , 2015 , 127, 11634-11638	3.6	7
119	Photoexcited Porphyrins as a Strong Suppressor of EAmyloid Aggregation and Synaptic Toxicity. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11472-6	16.4	66
118	Beta-Sheet-Forming, Self-Assembled Peptide Nanomaterials towards Optical, Energy, and Healthcare Applications. <i>Small</i> , 2015 , 11, 3623-40	11	133
117	A hematite-based photoelectrochemical platform for visible light-induced biosensing. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 4483-4486	7.3	21
116	Aluminum Nanoarrays for Plasmon-Enhanced Light Harvesting. ACS Nano, 2015, 9, 6206-13	16.7	70
115	Mussel-inspired plasmonic nanohybrids for light harvesting. <i>Advanced Materials</i> , 2014 , 26, 4463-8	24	60
114	Polydopamine as a Biomimetic Electron Gate for Artificial Photosynthesis. <i>Angewandte Chemie</i> , 2014 , 126, 6482-6486	3.6	11
113	Polydopamine as a biomimetic electron gate for artificial photosynthesis. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 6364-8	16.4	94
112	Nanobiocatalytic assemblies for artificial photosynthesis. <i>Current Opinion in Biotechnology</i> , 2014 , 28, 1-9	11.4	95
111	Biologically inspired pteridine redox centres for rechargeable batteries. <i>Nature Communications</i> , 2014 , 5, 5335	17.4	188
110	Nanostructures: Mussel-Inspired Plasmonic Nanohybrids for Light Harvesting (Adv. Mater. 26/2014). <i>Advanced Materials</i> , 2014 , 26, 4596-4596	24	
109	New platform for cytochrome p450 reaction combining in situ immobilization on biopolymer. <i>Bioconjugate Chemistry</i> , 2014 , 25, 2101-4	6.3	22
108	Crystalline IrO2-decorated TiO2 nanofiber scaffolds for robust and sustainable solar water oxidation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 5610	13	27
107	Serum-stable quantum dot-protein hybrid nanocapsules for optical bio-imaging. <i>Nanotechnology</i> , 2014 , 25, 175702	3.4	19
106	Lithium-Ion Batteries: Organic Nanohybrids for Fast and Sustainable Energy Storage (Adv. Mater. 16/2014). <i>Advanced Materials</i> , 2014 , 26, 2608-2608	24	
105	Organic nanohybrids for fast and sustainable energy storage. <i>Advanced Materials</i> , 2014 , 26, 2558-65	24	174

104	Near-infrared-light-driven artificial photosynthesis by nanobiocatalytic assemblies. <i>Chemistry - A European Journal</i> , 2014 , 20, 3584-8	4.8	21
103	Innentitelbild: Polydopamine as a Biomimetic Electron Gate for Artificial Photosynthesis (Angew. Chem. 25/2014). <i>Angewandte Chemie</i> , 2014 , 126, 6396-6396	3.6	
102	Self-Assembly of Metalloporphyrins into Light-Harvesting Peptide Nanofiber Hydrogels for Solar Water Oxidation. <i>Small</i> , 2014 , 10, 1272-1277	11	45
101	Silicon nanowire photocathodes for light-driven electroenzymatic synthesis. <i>ChemSusChem</i> , 2014 , 7, 3007-11	8.3	18
100	Biocatalytic photosynthesis with water as an electron donor. <i>Chemistry - A European Journal</i> , 2014 , 20, 12020-5	4.8	37
99	Bi-functional RuO2-Co3O4 core-shell nanofibers as a multi-component one-dimensional water oxidation catalyst. <i>Chemical Communications</i> , 2013 , 49, 9725-7	5.8	33
98	Cytochrome P450-catalyzed O-dealkylation coupled with photochemical NADPH regeneration. <i>Biotechnology and Bioengineering</i> , 2013 , 110, 383-90	4.9	40
97	Carbon-based nanomaterials for tissue engineering. Advanced Healthcare Materials, 2013, 2, 244-60	10.1	160
96	Redox cofactor from biological energy transduction as molecularly tunable energy-storage compound. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 8322-8	16.4	113
95	Synthesis of visible light-active CeO2 sheets via mussel-inspired CaCO3 mineralization. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 241-245	13	27
94	Coupling photocatalysis and redox biocatalysis toward biocatalyzed artificial photosynthesis. <i>Chemistry - A European Journal</i> , 2013 , 19, 4392-406	4.8	104
93	Myoblast differentiation on graphene oxide. <i>Biomaterials</i> , 2013 , 34, 2017-23	15.6	202
92	GrapheneRh-complex hydrogels for boosting redox biocatalysis. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 1040-1044	13	29
91	Bio-Inspired Synthesis of Minerals for Energy, Environment, and Medicinal Applications. <i>Advanced Functional Materials</i> , 2013 , 23, 10-25	15.6	83
90	Combined effect of mussel-inspired surface modification and topographical cues on the behavior of skeletal myoblasts. <i>Advanced Healthcare Materials</i> , 2013 , 2, 1445-50	10.1	25
89	Titelbild: Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energy-Storage Compound (Angew. Chem. 32/2013). <i>Angewandte Chemie</i> , 2013 , 125, 8329-8329	3.6	1
88	Redox Cofactor from Biological Energy Transduction as Molecularly Tunable Energy-Storage Compound. <i>Angewandte Chemie</i> , 2013 , 125, 8480-8486	3.6	22
87	Synergic effects of nanofiber alignment and electroactivity on myoblast differentiation. <i>Biomaterials</i> , 2012 , 33, 6098-104	15.6	176

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86	Highly photoactive, low bandgap TiO2 nanoparticles wrapped by graphene. <i>Advanced Materials</i> , 2012 , 24, 1084-8	24	783
85	Highly Photoactive, Low Bandgap TiO2 Nanoparticles Wrapped by Graphene (Adv. Mater. 8/2012). <i>Advanced Materials</i> , 2012 , 24, 1133-1133	24	9
84	Self-Assembled Light-Harvesting Peptide Nanotubes for Mimicking Natural Photosynthesis. <i>Angewandte Chemie</i> , 2012 , 124, 532-535	3.6	51
83	Titelbild: Self-Assembled Light-Harvesting Peptide Nanotubes for Mimicking Natural Photosynthesis (Angew. Chem. 2/2012). <i>Angewandte Chemie</i> , 2012 , 124, 285-285	3.6	
82	Self-assembled light-harvesting peptide nanotubes for mimicking natural photosynthesis. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 517-20	16.4	189
81	Silicon nanowires as a rechargeable template for hydride transfer in redox biocatalysis. <i>Nanoscale</i> , 2012 , 4, 7636-40	7.7	5
80	Biocatalyzed artificial photosynthesis by hydrogen-terminated silicon nanowires. <i>ChemSusChem</i> , 2012 , 5, 2129-32, 2089	8.3	18
79	Synthesis of graphene-wrapped CuO hybrid materials by CO2 mineralization. <i>Green Chemistry</i> , 2012 , 14, 2391	10	47
78	Energy storage in in vivo synthesizable biominerals. RSC Advances, 2012, 2, 5499	3.7	4
77	Graphene-oxide-based immunosensing through fluorescence quenching by peroxidase-catalyzed polymerization. <i>Small</i> , 2012 , 8, 1994-9	11	27
76	Biosensors: Graphene-Oxide-Based Immunosensing through Fluorescence Quenching by Peroxidase-Catalyzed Polymerization (Small 13/2012). <i>Small</i> , 2012 , 8, 1993-1993	11	
75	Graphene-based chemiluminescence resonance energy transfer for homogeneous immunoassay. <i>ACS Nano</i> , 2012 , 6, 2978-83	16.7	191
74	Visible light-driven NADH regeneration sensitized by proflavine for biocatalysis. <i>ChemBioChem</i> , 2012 , 13, 1278-82	3.8	40
73	Inside Cover: Visible Light-Driven NADH Regeneration Sensitized by Proflavine for Biocatalysis (ChemBioChem 9/2012). <i>ChemBioChem</i> , 2012 , 13, 1218-1218	3.8	
72	Artificial electron carriers for photoenzymatic synthesis under visible light. <i>Chemistry - A European Journal</i> , 2012 , 18, 5490-5	4.8	15
71	Artificial photosynthesis on a chip: microfluidic cofactor regeneration and photoenzymatic synthesis under visible light. <i>Lab on A Chip</i> , 2011 , 11, 2309-11	7.2	33
70	Multi-layered stacks of fluorescent dye-doped silica nanoparticles decorated by gold nanoparticles for solid-phase optical biosensing. <i>Journal of Materials Chemistry</i> , 2011 , 21, 17623		8
69	Zn-containing porphyrin as a biomimetic light-harvesting molecule for biocatalyzed artificial photosynthesis. <i>Chemical Communications</i> , 2011 , 47, 10227-9	5.8	51

68	Self-assembled, photoluminescent peptide hydrogel as a versatile platform for enzyme-based optical biosensors. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 1860-5	11.8	97
67	Selective detection of neurotoxin by photoluminescent peptide nanotubes. <i>Small</i> , 2011 , 7, 718-22	11	32
66	Rational design and engineering of quantum-dot-sensitized TiO[hanotube arrays for artificial photosynthesis. <i>Advanced Materials</i> , 2011 , 23, 1883-8	24	131
65	Graphene-biomineral hybrid materials. <i>Advanced Materials</i> , 2011 , 23, 2009-14	24	151
64	Artificial Photosynthesis: Rational Design and Engineering of Quantum-Dot-Sensitized TiO2 Nanotube Arrays for Artificial Photosynthesis (Adv. Mater. 16/2011). <i>Advanced Materials</i> , 2011 , 23, 188	2 ² 1882	
63	Biomimetic artificial photosynthesis by light-harvesting synthetic wood. <i>ChemSusChem</i> , 2011 , 4, 581-6	8.3	38
62	Self-Assembly of Semiconducting Photoluminescent Peptide Nanowires in the Vapor Phase. <i>Angewandte Chemie</i> , 2011 , 123, 1196-1199	3.6	20
61	Self-assembly of semiconducting photoluminescent peptide nanowires in the vapor phase. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 1164-7	16.4	82
60	Bio-inspired mineralization of CO2 gas to hollow CaCO3 microspheres and bone hydroxyapatite/polymer composites. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11070		28
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58	A microfluidic system incorporated with peptide/Pd nanowires for heterogeneous catalytic reactions. <i>Lab on A Chip</i> , 2011 , 11, 378-80	7.2	42
57	Photoenzymatic synthesis through sustainable NADH regeneration by SiO2-supported quantum dots. <i>Chemical Communications</i> , 2011 , 47, 4643-5	5.8	62
56	Bone-like peptide/hydroxyapatite nanocomposites assembled with multi-level hierarchical structures. <i>Soft Matter</i> , 2011 , 7, 7201	3.6	57
55	Gold Nanoparticle Enlargement Coupled with Fluorescence Decrease for Highly Sensitive Detection of Analytes. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1301, 235		
54	Bio-inspired strategy for on-surface synthesis of silver nanoparticles for metal/organic hybrid nanomaterials and LDI-MS substrates. <i>Nanotechnology</i> , 2011 , 22, 494020	3.4	60
53	Mussel-inspired functionalization of carbon nanotubes for hydroxyapatite mineralization. <i>Journal of Materials Chemistry</i> , 2010 , 20, 8848		80
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51	Synthesis of diphenylalanine/cobalt oxide hybrid nanowires and their application to energy storage. <i>ACS Nano</i> , 2010 , 4, 159-64	16.7	135

50	Dopamine-induced mineralization of calcium carbonate vaterite microspheres. <i>Langmuir</i> , 2010 , 26, 147	3ұ-6	99
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48	Microfluidic dissociation and clearance of Alzheimer's beta-amyloid aggregates. <i>Biomaterials</i> , 2010 , 31, 6789-95	15.6	15
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42	General functionalization route for cell adhesion on non-wetting surfaces. <i>Biomaterials</i> , 2010 , 31, 2535	-415.6	546
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40	Mussel-inspired transformation of CaCO3 to bone minerals. <i>Biomaterials</i> , 2010 , 31, 6628-34	15.6	93
39	CdTe, CdSe, and CdS nanocrystals for highly efficient regeneration of nicotinamide cofactor under visible light. <i>Small</i> , 2010 , 6, 922-6	11	59
38	Photoluminescent Peptide Nanotubes. Advanced Materials, 2009, 21, 1577-1581	24	120
37	Screening Xanthene Dyes for Visible Light-Driven Nicotinamide Adenine Dinucleotide Regeneration and Photoenzymatic Synthesis. <i>Advanced Synthesis and Catalysis</i> , 2009 , 351, 2589-2594	5.6	81
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35	Synthesis of diphenylalanine/polyaniline core/shell conducting nanowires by peptide self-assembly. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4820-3	16.4	89
34	Cell-free synthesis of functional proteins using transcription/translation machinery entrapped in silica sol-gel matrix. <i>Biotechnology and Bioengineering</i> , 2009 , 102, 303-7	4.9	5
33	Colloidal nanoparticles as a wireless booster for electroenzymatic reactions. <i>Small</i> , 2009 , 5, 2162-6	11	11

32	Silica-coated alginate beads for in vitro protein synthesis via transcription/translation machinery encapsulation. <i>Journal of Biotechnology</i> , 2009 , 143, 183-9	3.7	31
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30	Gold nanoparticle enlargement coupled with fluorescence quenching for highly sensitive detection of analytes. <i>Langmuir</i> , 2009 , 25, 13302-5	4	51
29	Bio-inspired fabrication of superhydrophobic surfaces through peptide self-assembly. <i>Soft Matter</i> , 2009 , 5, 2717	3.6	63
28	Inhibition of beta-amyloid peptide aggregation and neurotoxicity by alpha-d-mannosylglycerate, a natural extremolyte. <i>Peptides</i> , 2008 , 29, 578-84	3.8	41
27	Small stress molecules inhibit aggregation and neurotoxicity of prion peptide 106-126. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 365, 808-13	3.4	37
26	Solid-Phase Growth of Nanostructures from Amorphous Peptide Thin Film: Effect of Water Activity and Temperature. <i>Chemistry of Materials</i> , 2008 , 20, 4284-4290	9.6	49
25	Solar energy in production of L-glutamate through visible light active photocatalystredox enzyme coupled bioreactor. <i>Chemical Communications</i> , 2008 , 5423-5	5.8	54
24	Microfluidic self-assembly of insulin monomers into amyloid fibrils on a solid surface. <i>Langmuir</i> , 2008 , 24, 7068-71	4	21
23	Highly accelerated self-assembly and fibrillation of prion peptides on solid surfaces. <i>Langmuir</i> , 2008 , 24, 13822-7	4	19
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21	High-Temperature Self-Assembly of Peptides into Vertically Well-Aligned Nanowires by Aniline Vapor. <i>Advanced Materials</i> , 2008 , 20, 3754-3758	24	146
20	A synthetic amyloid lawn system for high-throughput analysis of amyloid toxicity and drug screening. <i>Biomaterials</i> , 2008 , 29, 2813-9	15.6	11
19	Surface plasmon resonance analysis of Alzheimer's beta-amyloid aggregation on a solid surface: from monomers to fully-grown fibrils. <i>Analytical Chemistry</i> , 2008 , 80, 2400-7	7.8	63
18	Protein micropatterning on bifunctional organic-inorganic sol-gel hybrid materials. <i>Langmuir</i> , 2007 , 23, 4732-6	4	25
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15	5 Toward the Large Scale Cultivation of Hyperthermophiles at High-Temperature and High-Pressure. <i>Methods in Microbiology</i> , 2006 , 35, 109-126	2.8	4

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1	4	Pressure affects transcription profiles of Methanocaldococcus jannaschii despite the absence of barophilic growth under gas-transfer limitation. <i>Environmental Microbiology</i> , 2006 , 8, 2031-5	5.2	11
1	3	Ex situ atomic force microscopy analysis of beta-amyloid self-assembly and deposition on a synthetic template. <i>Langmuir</i> , 2006 , 22, 6977-85	4	27
1	2	Trehalose differentially inhibits aggregation and neurotoxicity of beta-amyloid 40 and 42. <i>Neurobiology of Disease</i> , 2005 , 20, 74-81	7.5	266
1	1	Ectoine and hydroxyectoine inhibit aggregation and neurotoxicity of Alzheimer beta-amyloid. <i>FEBS Letters</i> , 2005 , 579, 4775-80	3.8	93
1	0	Template-directed self-assembly and growth of insulin amyloid fibrils. <i>Biotechnology and Bioengineering</i> , 2005 , 90, 848-55	4.9	30
9		Metabolizing enzyme toxicology assay chip (MetaChip) for high-throughput microscale toxicity analyses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 98.	3 -7 .5	154
8		Insulin amyloid fibrillation at above 100 degrees C: new insights into protein folding under extreme temperatures. <i>Protein Science</i> , 2004 , 13, 2429-36	6.3	77
7		Inhibition of insulin amyloid formation by small stress molecules. <i>FEBS Letters</i> , 2004 , 564, 121-5	3.8	179
6		Inhibitory effect of L-pyroglutamate on extremophiles: correlation with growth temperature and pH. <i>FEMS Microbiology Letters</i> , 2003 , 221, 187-90	2.9	5
5		Rupture of the cell envelope by decompression of the deep-sea methanogen Methanococcus jannaschii. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 1458-63	4.8	47
4		Cultivation of the hyperthermophilic archaeonSulfolobus solfataricus in low-salt media. <i>Biotechnology and Bioprocess Engineering</i> , 1999 , 4, 21-25	3.1	7
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2		Constant-volume fed-batch operation for high density cultivation of hyperthermophilic aerobes. <i>Biotechnology Letters</i> , 1997 , 11, 277-281		17
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