Rafal Klajn

List of Publications by Year
in descending order

77 papers	9,029 citations	53794 45 h-index	66911 78 g-index
86 all docs	86 docs citations	86 times ranked	10137 citing authors

#	Article	IF	Citations
1	Selfâ€Complementary Zwitterionic Peptides Direct Nanoparticle Assembly and Enable Enzymatic Selection of Endocytic Pathways. Advanced Materials, 2022, 34, e2104962.	21.0	20
2	Coexistence of 1â€‰:â€‰1 and 2â€‰:â€‰1 inclusion complexes of indigo carmine. Chemical Communications, 2022, 58, 3461-3464.	4.1	5
3	Encapsulation within a coordination cage modulates the reactivity of redox-active dyes. Communications Chemistry, 2022, 5, .	4.5	13
4	Polarization-sensitive optoionic membranes from chiral plasmonic nanoparticles. Nature Nanotechnology, 2022, 17, 408-416.	31.5	83
5	Electron catalysis expands the supramolecular chemistâ€™s toolbox. CheM, 2022, 8, 1183-1186.	11.7	2
6	Ternary host-guest complexes with rapid exchange kinetics and photoswitchable fluorescence. CheM, 2022, 8, 2362-2379.	11.7	15
7	Lightâ€Responsive Dynamic DNAâ€Origamiâ€Based Plasmonic Assemblies. Angewandte Chemie - International Edition, 2021, 60, 5859-5863.	13.8	75
8	Lightâ€Responsive Dynamic DNAâ€Origamiâ€Based Plasmonic Assemblies. Angewandte Chemie, 2021, 133, 5923-5927.	2.0	10
9	Morphology control in crystalline nanoparticleâ€“polymer aggregates. Annals of the New York Academy of Sciences, 2021, , .	3.8	8
10	Electrostatic co-assembly of nanoparticles with oppositely charged small molecules into static and dynamic superstructures. Nature Chemistry, 2021, 13, 940-949.	13.6	121
11	Dissipative Self-Assembly: Fueling with Chemicals versus Light. CheM, 2021, 7, 23-37.	11.7	112
12	The Many Ways to Assemble Nanoparticles Using Light. Advanced Materials, 2020, 32, e1905866.	21.0	70
13	Modulating the Optical Properties of BODIPY Dyes by Noncovalent Dimerization within a Flexible Coordination Cage. Journal of the American Chemical Society, 2020, 142, 17721-17729.	13.7	57
14	Lightâ€Driven Proton Transfer for Cyclic and Temporal Switching of Enzymatic Nanoreactors. Small, 2020, 16, e2002135.	10.0	34
15	Improving Fatigue Resistance of Dihydropyrene by Encapsulation within a Coordination Cage. Journal of the American Chemical Society, 2020, 142, 14557-14565.	13.7	39
16	Molecular Photoswitching in Confined Spaces. Accounts of Chemical Research, 2020, 53, 2600-2610.	15.6	86
17	Enzymatic Nanoreactors: Lightâ€Driven Proton Transfer for Cyclic and Temporal Switching of Enzymatic Nanoreactors (Small 37/2020). Small, 2020, 16, 2070201.	10.0	1
18	Selfâ€Assembly: The Many Ways to Assemble Nanoparticles Using Light (Adv. Mater. 20/2020). Advanced Materials, 2020, 32, 2070154.	21.0	0

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19	SQUID-on-tip with single-electron spin sensitivity for high-field and ultra-low temperature nanomagnetic imaging. Nanoscale, 2020, 12, 3174-3182.	5.6	42
20	Molecular Factors Controlling the Isomerization of Azobenzenes in the Cavity of a Flexible Coordination Cage. Journal of the American Chemical Society, 2020, 142, 9792-9802.	13.7	75
21	Chemical reactivity under nanoconfinement. Nature Nanotechnology, 2020, 15, 256-271.	31.5	403
22	Reversible switching of arylazopyrazole within a metalâ€"organic cage. Beilstein Journal of Organic Chemistry, 2019, 15, 2398-2407.	2.2	35
23	Polysilsesquioxane Nanowire Networks as an â€œArtificial Solventâ€• for Reversible Operation of Photochromic Molecules. Nano Letters, 2019, 19, 7106-7111.	9.1	23
24	Stimuli-responsive self-assembly of nanoparticles. Chemical Society Reviews, 2019, 48, 1342-1361.	38.1	339
25	Supramolecular Control of Azobenzene Switching on Nanoparticles. Journal of the American Chemical Society, 2019, 141, 1949-1960.	13.7	85
26	Dissipative Selfâ€Assembly Driven by the Consumption of Chemical Fuels. Advanced Materials, 2018, 30, e1706750.	21.0	176
27	â€œPrecipitation on Nanoparticlesâ€: Attractive Intermolecular Interactions Stabilize Specific Ligand Ratios on the Surfaces of Nanoparticles. Angewandte Chemie - International Edition, 2018, 57, 7023-7027.	13.8	17
28	Reversible chromism of spiropyran in the cavity of a flexible coordination cage. Nature Communications, 2018, 9, 641.	12.8	148
29	Integrating Macromolecules with Molecular Switches. Macromolecular Rapid Communications, 2018, 39, 1700827.	3.9	5
30	Reversible photoswitching of encapsulated azobenzenes in water. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9379-9384.	7.1	110
31	â€œPrecipitation on Nanoparticlesâ€: Attractive Intermolecular Interactions Stabilize Specific Ligand Ratios on the Surfaces of Nanoparticles. Angewandte Chemie, 2018, 130, 7141-7145.	2.0	6
32	Clathrates grow up. Science, 2017, 355, 912-912.	12.6	2
33	Irreversible Bleaching of Donorâ€"Acceptor Stenhouse Adducts on the Surfaces of Magnetite Nanoparticles. ChemPhotoChem, 2017, 1, 230-236.	3.0	32
34	Tunable porous nanoallotropes prepared by post-assembly etching of binary nanoparticle superlattices. Science, 2017, 358, 514-518.	12.6	120
35	Chemical systems out of equilibrium. Chemical Society Reviews, 2017, 46, 5474-5475.	38.1	136
36	Out-of-Equilibrium Aggregates and Coatings during Seeded Growth of Metallic Nanoparticles. Journal of the American Chemical Society, 2017, 139, 17973-17978.	13.7	62

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37	Aqueous Lightâ€Controlled Selfâ€Assembly of Nanoparticles. Advanced Optical Materials, 2016, 4, 1373-1377.	7.3	81
38	Differing Isomerization Kinetics of Azobenzene-Functionalized Self-Assembled Monolayers in Ambient Air and in Vacuum. Langmuir, 2016, 32, 10795-10801.	3.5	45
39	Noncovalent Interactions with Proteins Modify the Physicochemical Properties of a Molecular Switch. ChemPlusChem, 2016, 81, 44-48.	2.8	14
40	Controlling the lifetimes of dynamic nanoparticle aggregates by spiropyran functionalization. Nanoscale, 2016, 8, 19280-19286.	5.6	66
41	Reversible Photoisomerization of Spiropyran on the Surfaces of Au₂₅ Nanoclusters. ChemPhysChem, 2016, 17, 1805-1809.	2.1	28
42	Borrowing titaniaâ€™s photoinduced electrons for molecular switching. Science China Chemistry, 2016, 59, 420-421.	8.2	2
43	Reversible trapping and reaction acceleration within dynamically self-assembling nanoflasks. Nature Nanotechnology, 2016, 11, 82-88.	31.5	305
44	Orthogonal Lightâ€Induced Selfâ€Assembly of Nanoparticles using Differently Substituted Azobenzenes. Angewandte Chemie, 2015, 127, 12571-12574.	2.0	42
45	Orthogonal Lightâ€Induced Selfâ€Assembly of Nanoparticles using Differently Substituted Azobenzenes. Angewandte Chemie - International Edition, 2015, 54, 12394-12397.	13.8	132
46	Titelbild: Orthogonal Lightâ€Induced Selfâ€Assembly of Nanoparticles using Differently Substituted Azobenzenes (Angew. Chem. 42/2015). Angewandte Chemie, 2015, 127, 12347-12347.	2.0	2
47	Tailoring the Properties of Surface-Immobilized Azobenzenes by Monolayer Dilution and Surface Curvature. Langmuir, 2015, 31, 1048-1057.	3.5	71
48	Light-controlled self-assembly of non-photoresponsive nanoparticles. Nature Chemistry, 2015, 7, 646-652.	13.6	440
49	Magnetic field-induced self-assembly of iron oxide nanocubes. Faraday Discussions, 2015, 181, 403-421.	3.2	56
50	Dual-responsive nanoparticles that aggregate under the simultaneous action of light and CO₂. Chemical Communications, 2015, 51, 2036-2039.	4.1	54
51	Spiropyran-based dynamic materials. Chemical Society Reviews, 2014, 43, 148-184.	38.1	1,571
52	Support Curvature and Conformational Freedom Control Chemical Reactivity of Immobilized Species. Journal of the American Chemical Society, 2014, 136, 2711-2714.	13.7	61
53	Nanoporous frameworks exhibiting multiple stimuli responsiveness. Nature Communications, 2014, 5, 3588.	12.8	146
54	Cyclic Kinetics during Thermal Equilibration of an Axially Chiral Bis-Spiropyran. Journal of the American Chemical Society, 2014, 136, 11276-11279.	13.7	28

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55	Self-assembly of magnetite nanocubes into helical superstructures. Science, 2014, 345, 1149-1153.	12.6	435
56	Dualâ€Responsive Nanoparticles and their Selfâ€Assembly. Advanced Materials, 2013, 25, 422-426.	21.0	123
57	Photocontrol of Electrical Conductance with a Nonsymmetrical Azobenzene Dithiol. Synlett, 2013, 24, 2370-2374.	1.8	11
58	Nanoparticles: Dualâ€Responsive Nanoparticles and their Selfâ€Assembly (Adv. Mater. 3/2013). Advanced Materials, 2013, 25, 492-492.	21.0	1
59	Dynamically Self-Assembling Carriers Enable Guiding of Diamagnetic Particles by Weak Magnets. Journal of the American Chemical Society, 2012, 134, 19564-19567.	13.7	67
60	Metallic Nanobowls by Galvanic Replacement Reaction on Heterodimeric Nanoparticles. Small, 2012, 8, 654-660.	10.0	46
61	Metallic Nanobowls: Metallic Nanobowls by Galvanic Replacement Reaction on Heterodimeric Nanoparticles (Small 5/2012). Small, 2012, 8, 622-622.	10.0	0
62	Immobilized azobenzenes for the construction of photoresponsive materials. Pure and Applied Chemistry, 2010, 82, 2247-2279.	1.9	190
63	Molecular-Mechanical Switching at the Nanoparticleâ˘Solvent Interface: Practice and Theory. Journal of the American Chemical Society, 2010, 132, 4310-4320.	13.7	61
64	Nanoparticles functionalised with reversible molecular and supramolecular switches. Chemical Society Reviews, 2010, 39, 2203.	38.1	484
65	Innentitelbild: Writing Self-Erasing Images using Metastable Nanoparticle â€œInksâ€•(Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overl	2.0	0
66	Inside Cover: Writing Self-Erasing Images using Metastable Nanoparticle â€œInksâ€•(Angew. Chem. Int. Ed.) Tj ETQq0 0 0 rgBT /Overlock	13.8	1
67	Photoconductance and inverse photoconductance in films of functionalized metal nanoparticles. Nature, 2009, 460, 371-375.	27.8	239
68	Dynamic hook-and-eye nanoparticle sponges. Nature Chemistry, 2009, 1, 733-738.	13.6	114
69	Metal Nanoparticles Functionalized with Molecular and Supramolecular Switches. Journal of the American Chemical Society, 2009, 131, 4233-4235.	13.7	119
70	Assembly of Polygonal Nanoparticle Clusters Directed by Reversible Noncovalent Bonding Interactions. Nano Letters, 2009, 9, 3185-3190.	9.1	82
71	Writing Selfâ€Erasing Images using Metastable Nanoparticle â€œInksâ€• Angewandte Chemie - International Edition, 2009, 48, 7035-7039.	13.8	344
72	Bulk Synthesis and Surface Patterning of Nanoporous Metals and Alloys from Supraspherical Nanoparticle Aggregates. Advanced Functional Materials, 2008, 18, 2763-2769.	14.9	46

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73	Light-controlled self-assembly of reversible and irreversible nanoparticle suprastructures. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10305-10309.	7.1	384
74	Synthesis of Heterodimeric Sphereâ€"Prism Nanostructures via Metastable Gold Supraspheres. Angewandte Chemie - International Edition, 2007, 46, 8363-8367.	13.8	44
75	Plastic and Moldable Metals by Self-Assembly of Sticky Nanoparticle Aggregates. Science, 2007, 316, 261-264.	12.6	270
76	Ionic-like Behavior of Oppositely Charged Nanoparticles. Journal of the American Chemical Society, 2006, 128, 15046-15047.	13.7	107
77	Color Micro- and Nanopatterning with Counter-Propagating Reaction-Diffusion Fronts. Advanced Materials, 2004, 16, 1912-1917.	21.0	31