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	Spiropyran-based dynamic materials. Chemical Society Reviews, 2014, 43, 148-184.	38.1	1,571
2	Nanoparticles functionalised with reversible molecular and supramolecular switches. Chemical Society Reviews, 2010, 39, 2203.	38.1	484
3	Light-controlled self-assembly of non-photoresponsive nanoparticles. Nature Chemistry, 2015, 7, 646-652.	13.6	440
4	Self-assembly of magnetite nanocubes into helical superstructures. Science, 2014, 345, 1149-1153.	12.6	435
5	Chemical reactivity under nanoconfinement. Nature Nanotechnology, 2020, 15, 256-271.	31.5	403
6	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
7	Writing Selfâ€Erasing Images using Metastable Nanoparticle â€œInksâ€. Angewandte Chemie - International Edition, 2009, 48, 7035-7039.	13.8	344
8	Stimuli-responsive self-assembly of nanoparticles. Chemical Society Reviews, 2019, 48, 1342-1361.	38.1	339
9	Reversible trapping and reaction acceleration within dynamically self-assembling nanoflasks. Nature Nanotechnology, 2016, 11, 82-88.	31.5	305
10	Plastic and Moldable Metals by Self-Assembly of Sticky Nanoparticle Aggregates. Science, 2007, 316, 261-264.	12.6	270
11	Photoconductance and inverse photoconductance in films of functionalized metal nanoparticles. Nature, 2009, 460, 371-375.	27.8	239
12	Immobilized azobenzenes for the construction of photoresponsive materials. Pure and Applied Chemistry, 2010, 82, 2247-2279.	1.9	190
13	Dissipative Selfâ€Assembly Driven by the Consumption of Chemical Fuels. Advanced Materials, 2018, 30, e1706750.	21.0	176
14	Reversible chromism of spiropyran in the cavity of a flexible coordination cage. Nature Communications, 2018, 9, 641.	12.8	148
15	Nanoporous frameworks exhibiting multiple stimuli responsiveness. Nature Communications, 2014, 5, 3588.	12.8	146
16	Chemical systems out of equilibrium. Chemical Society Reviews, 2017, 46, 5474-5475.	38.1	136
17	Orthogonal Lightâ€Induced Selfâ€Assembly of Nanoparticles using Differently Substituted Azobenzenes. Angewandte Chemie - International Edition, 2015, 54, 12394-12397.	13.8	132
18	Dualâ€Responsive Nanoparticles and their Selfâ€Assembly. Advanced Materials, 2013, 25, 422-426.	21.0	123

#	ARTICLE	IF	CITATIONS
19	Electrostatic co-assembly of nanoparticles with oppositely charged small molecules into static and dynamic superstructures. Nature Chemistry, 2021, 13, 940-949.	13.6	121
20	Tunable porous nanoallotropes prepared by post-assembly etching of binary nanoparticle superlattices. Science, 2017, 358, 514-518.	12.6	120
21	Metal Nanoparticles Functionalized with Molecular and Supramolecular Switches. Journal of the American Chemical Society, 2009, 131, 4233-4235.	13.7	119
22	Dynamic hook-and-eye nanoparticle sponges. Nature Chemistry, 2009, 1, 733-738.	13.6	114
23	Dissipative Self-Assembly: Fueling with Chemicals versus Light. CheM, 2021, 7, 23-37.	11.7	112
24	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
25	Ionic-like Behavior of Oppositely Charged Nanoparticles. Journal of the American Chemical Society, 2006, 128, 15046-15047.	13.7	107
26	Molecular Photoswitching in Confined Spaces. Accounts of Chemical Research, 2020, 53, 2600-2610.	15.6	86
27	Supramolecular Control of Azobenzene Switching on Nanoparticles. Journal of the American Chemical Society, 2019, 141, 1949-1960.	13.7	85
28	Polarization-sensitive optoionic membranes from chiral plasmonic nanoparticles. Nature Nanotechnology, 2022, 17, 408-416.	31.5	83
29	Assembly of Polygonal Nanoparticle Clusters Directed by Reversible Noncovalent Bonding Interactions. Nano Letters, 2009, 9, 3185-3190.	9.1	82
30	Aqueous Lightâ€Controlled Selfâ€Assembly of Nanoparticles. Advanced Optical Materials, 2016, 4, 1373-1377.	7.3	81
31	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
32	Lightâ€Responsive Dynamic DNAâ€Origamiâ€Based Plasmonic Assemblies. Angewandte Chemie - International Edition, 2021, 60, 5859-5863.	13.8	75
33	Tailoring the Properties of Surface-Immobilized Azobenzenes by Monolayer Dilution and Surface Curvature. Langmuir, 2015, 31, 1048-1057.	3.5	71
34	The Many Ways to Assemble Nanoparticles Using Light. Advanced Materials, 2020, 32, e1905866.	21.0	70
35	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
36	Controlling the lifetimes of dynamic nanoparticle aggregates by spiropyran functionalization. Nanoscale, 2016, 8, 19280-19286.	5.6	66

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37	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
38	Molecular-Mechanical Switching at the Nanoparticleâˆ'Solvent Interface: Practice and Theory. Journal of the American Chemical Society, 2010, 132, 4310-4320.	13.7	61
39	Support Curvature and Conformational Freedom Control Chemical Reactivity of Immobilized Species. Journal of the American Chemical Society, 2014, 136, 2711-2714.	13.7	61
40	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
41	Magnetic field-induced self-assembly of iron oxide nanocubes. Faraday Discussions, 2015, 181, 403-421.	3.2	56
42	Dual-responsive nanoparticles that aggregate under the simultaneous action of light and CO₂. Chemical Communications, 2015, 51, 2036-2039.	4.1	54
43	Bulk Synthesis and Surface Patterning of Nanoporous Metals and Alloys from Supraspherical Nanoparticle Aggregates. Advanced Functional Materials, 2008, 18, 2763-2769.	14.9	46
44	Metallic Nanobowls by Galvanic Replacement Reaction on Heterodimeric Nanoparticles. Small, 2012, 8, 654-660.	10.0	46
45	Differing Isomerization Kinetics of Azobenzene-Functionalized Self-Assembled Monolayers in Ambient Air and in Vacuum. Langmuir, 2016, 32, 10795-10801.	3.5	45
46	Synthesis of Heterodimeric Sphereâ€"Prism Nanostructures via Metastable Gold Supraspheres. Angewandte Chemie - International Edition, 2007, 46, 8363-8367.	13.8	44
47	Orthogonal Lightâ€Induced Selfâ€Assembly of Nanoparticles using Differently Substituted Azobenzenes. Angewandte Chemie, 2015, 127, 12571-12574.	2.0	42
48	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
49	Improving Fatigue Resistance of Dihydropyrene by Encapsulation within a Coordination Cage. Journal of the American Chemical Society, 2020, 142, 14557-14565.	13.7	39
50	Reversible switching of arylazopyrazole within a metalâ€"organic cage. Beilstein Journal of Organic Chemistry, 2019, 15, 2398-2407.	2.2	35
51	Lightâ€Driven Proton Transfer for Cyclic and Temporal Switching of Enzymatic Nanoreactors. Small, 2020, 16, e2002135.	10.0	34
52	Irreversible Bleaching of Donorâ€"Acceptor Stenhouse Adducts on the Surfaces of Magnetite Nanoparticles. ChemPhotoChem, 2017, 1, 230-236.	3.0	32
53	Color Micro- and Nanopatterning with Counter-Propagating Reaction-Diffusion Fronts. Advanced Materials, 2004, 16, 1912-1917.	21.0	31
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	Reversible Photoisomerization of Spiropyran on the Surfaces of Au₂₅ Nanoclusters. ChemPhysChem, 2016, 17, 1805-1809.	2.1	28
56	Polysilsesquioxane Nanowire Networks as an â€œArtificial Solventâ€•for Reversible Operation of Photochromic Molecules. Nano Letters, 2019, 19, 7106-7111.	9.1	23
57	Selfâ€Complementary Zwitterionic Peptides Direct Nanoparticle Assembly and Enable Enzymatic Selection of Endocytic Pathways. Advanced Materials, 2022, 34, e2104962.	21.0	20
58	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
59	Ternary host-guest complexes with rapid exchange kinetics and photoswitchable fluorescence. CheM, 2022, 8, 2362-2379.	11.7	15
60	Noncovalent Interactions with Proteins Modify the Physicochemical Properties of a Molecular Switch. ChemPlusChem, 2016, 81, 44-48.	2.8	14
61	Encapsulation within a coordination cage modulates the reactivity of redox-active dyes. Communications Chemistry, 2022, 5, .	4.5	13
62	Photocontrol of Electrical Conductance with a Nonsymmetrical Azobenzene Dithiol. Synlett, 2013, 24, 2370-2374.	1.8	11
63	Lightâ€Responsive Dynamic DNAâ€Origamiâ€Based Plasmonic Assemblies. Angewandte Chemie, 2021, 133, 5923-5927.	2.0	10
64	Morphology control in crystalline nanoparticleâ€“polymer aggregates. Annals of the New York Academy of Sciences, 2021, , .	3.8	8
65	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
66	Integrating Macromolecules with Molecular Switches. Macromolecular Rapid Communications, 2018, 39, 1700827.	3.9	5
67	Coexistence of 1â€‰:â€‰1 and 2â€‰:â€‰1 inclusion complexes of indigo carmine. Chemical Communications, 2022, 58, 3461-3464.	4.1	5
68	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
69	Borrowing titaniaâ€™s photoinduced electrons for molecular switching. Science China Chemistry, 2016, 59, 420-421.	8.2	2
70	Clathrates grow up. Science, 2017, 355, 912-912.	12.6	2
71	Electron catalysis expands the supramolecular chemistâ€™s toolbox. CheM, 2022, 8, 1183-1186.	11.7	2
72	Inside Cover: Writing Self-Erasing Images using Metastable Nanoparticle â€œInksâ€•(Angew. Chem. Int. Ed.) Tj ETQq0 0 0 rgBT /Overloc	13.8	1

#	ARTICLE	IF	CITATIONS
73	Nanoparticles: Dualâ€Responsive Nanoparticles and their Selfâ€Assembly (Adv. Mater. 3/2013). Advanced Materials, 2013, 25, 492-492.	21.0	1
74	Enzymatic Nanoreactors: Lightâ€Driven Proton Transfer for Cyclic and Temporal Switching of Enzymatic Nanoreactors (Small 37/2020). Small, 2020, 16, 2070201.	10.0	1
75	Innentitelbild: Writing Self-Erasing Images using Metastable Nanoparticle â€œInksâ€•(Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overl	2.0	0
76	Metallic Nanobowls: Metallic Nanobowls by Galvanic Replacement Reaction on Heterodimeric Nanoparticles (Small 5/2012). Small, 2012, 8, 622-622.	10.0	0
77	Selfâ€Assembly: The Many Ways to Assemble Nanoparticles Using Light (Adv. Mater. 20/2020). Advanced Materials, 2020, 32, 2070154.	21.0	0