Charl F J Faul

List of Publications by Year
in descending order

120 papers	6,284 citations	61984 43 h-index	74163 75 g-index
128 all docs	128 docs citations	128 times ranked	6751 citing authors

#	Article	IF	Citations
1	Ionic Self-Assembly: Facile Synthesis of Supramolecular Materials. Advanced Materials, 2003, 15, 673-683.	21.0	721
2	Highly Efficient and Reversible Iodine Capture in Hexaphenylbenzene-Based Conjugated Microporous Polymers. Macromolecules, 2016, 49, 6322-6333.	4.8	307
3	Ionic Self-Assembly for Functional Hierarchical Nanostructured Materials. Accounts of Chemical Research, 2014, 47, 3428-3438.	15.6	219
4	Highly Photoluminescent Polyoxometaloeuropate-Surfactant Complexes by Ionic Self-Assembly. Chemistry - A European Journal, 2005, 11, 1001-1009.	3.3	159
5	Fluorescent Microporous Polyimides Based on Perylene and Triazine for Highly CO₂-Selective Carbon Materials. Macromolecules, 2015, 48, 2064-2073.	4.8	147
6	Organized Nanostructured Complexes of Polyoxometalates and Surfactants that Exhibit Photoluminescence and Electrochromism. Advanced Functional Materials, 2009, 19, 642-652.	14.9	141
7	Conjugated Microporous Polycarbazole Networks as Precursors for Nitrogen-Enriched Microporous Carbons for CO₂ Storage and Electrochemical Capacitors. Chemistry of Materials, 2017, 29, 4885-4893.	6.7	140
8	Aniline Oligomers â€“ Architecture, Function and New Opportunities for Nanostructured Materials. Macromolecular Rapid Communications, 2008, 29, 280-292.	3.9	139
9	Nitrogen-Rich Conjugated Microporous Polymers: Facile Synthesis, Efficient Gas Storage, and Heterogeneous Catalysis. ACS Applied Materials & Interfaces, 2017, 9, 38390-38400.	8.0	131
10	A Supramolecular Approach to Optically Anisotropic Materials: Photosensitive Ionic Self-Assembly Complexes. Advanced Materials, 2006, 18, 2133-2136.	21.0	125
11	Uniform electroactive fibre-like micelle nanowires for organic electronics. Nature Communications, 2017, 8, 15909.	12.8	120
12	Modulating helicity through amphiphilicityâ€”tuning supramolecular interactions for the controlled assembly of perylenes. Chemical Communications, 2011, 47, 5554-5556.	4.1	112
13	Hydrogen-Bonded Polymerâ^'Azobenzene Complexes: Enhanced Photoinduced Birefringence with High Temporal Stability through Interplay of Intermolecular Interactions. Chemistry of Materials, 2008, 20, 6358-6363.	6.7	111
14	Conjugated microporous polymers for energy storage: Recent progress and challenges. Nano Energy, 2021, 85, 105958.	16.0	110
15	Tunable Surface Area, Porosity, and Function in Conjugated Microporous Polymers. Angewandte Chemie - International Edition, 2019, 58, 11715-11719.	13.8	109
16	Induced Supramolecular Chirality in Nanostructured Materials:â€‰ Ionic Self-Assembly of Perylene-Chiral Surfactant Complexes. Chemistry of Materials, 2006, 18, 1839-1847.	6.7	108
17	Selfâ€Assembled Sugarâ€Substituted Perylene Diimide Nanostructures with Homochirality and High Gas Sensitivity. Advanced Functional Materials, 2012, 22, 4149-4158.	14.9	107
18	Conjugated microporous polytriphenylamine networks. Chemical Communications, 2014, 50, 8002-8005.	4.1	101

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19	Helical supramolecular aggregates, mesoscopic organisation and nanofibers of a perylenebisimideâ€“chiral surfactant complex via ionic self-assembly. Journal of Materials Chemistry, 2009, 19, 2356.	6.7	96
20	Molecular engineering of polymeric supra-amphiphiles. Chemical Society Reviews, 2019, 48, 989-1003.	38.1	90
21	Self-Assembly and Electrical Conductivity Transitions in Conjugated Oligoaniline-Surfactant Complexes. Angewandte Chemie - International Edition, 2005, 44, 751-756.	13.8	81
22	Uniform â€œPatchyâ€• Platelets by Seeded Heteroepitaxial Growth of Crystallizable Polymer Blends in Two Dimensions. Journal of the American Chemical Society, 2017, 139, 4409-4417.	13.7	78
23	Alignment of a Perylene-Based Ionic Self-Assembly Complex in Thermotropic and Lyotropic Liquid-Crystalline Phases. Advanced Functional Materials, 2004, 14, 835-841.	14.9	77
24	Facile Synthesis of Optically Functional, Highly Organized Nanostructures: Dyeâ€“Surfactant Complexes. Chemistry - A European Journal, 2002, 8, 2764.	3.3	76
25	Local and macroscopic electrostatic interactions in single Î±-helices. Nature Chemical Biology, 2015, 11, 221-228.	8.0	72
26	Effect of Extraction Procedure on Measured Sugar Concentrations in Onion (Allium cepa L.) Bulbs. Journal of Agricultural and Food Chemistry, 2007, 55, 4299-4306.	5.2	71
27	Ionic Self-Assembly of Dyeâ^'Surfactant Complexes:Â Influence of Tail Lengths and Dye Architecture on the Phase Morphology. Langmuir, 2002, 18, 5939-5945.	3.5	70
28	Functional block-like structures from electroactive tetra(aniline) oligomers. Journal of Materials Chemistry, 2011, 21, 18137.	6.7	67
29	Synthesis of Supramolecular Polymers by Ionic Self-Assembly of Oppositely Charged Dyes. Chemistry - A European Journal, 2005, 11, 1305-1311.	3.3	66
30	Chiral Perylene Diimides: Building Blocks for Ionic Selfâ€Assembly. Chemistry - A European Journal, 2015, 21, 5118-5128.	3.3	66
31	A crosslinking alkylation strategy to construct nitrogen-enriched tetraphenylmethane-based porous organic polymers as efficient carbon dioxide and iodine adsorbents. Chemical Engineering Journal, 2020, 382, 122998.	12.7	65
32	Bioinspired supramolecular liquid crystals. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 2709-2719.	3.4	64
33	Induced Liquid Crystallinity in Switchable Side-Chain Discotic Molecules. Chemistry of Materials, 2004, 16, 3867-3871.	6.7	63
34	Perylenediimide-surfactant complexes: thermotropic liquid-crystalline materials via ionic self-assemblyElectronic supplementary information (ESI) available: 1H-NMR, IR, UV and fluorescence spectra of 1. See http://www.rsc.org/suppdata/cc/b2/b211753c/. Chemical Communications, 2003, , 894-895.	4.1	59
35	Redoxâ€Active, Organometallic Surfaceâ€Relief Gratings from Azobenzeneâ€Containing Polyferrocenylsilane Block Copolymers. Advanced Materials, 2012, 24, 926-931.	21.0	59
36	Surface-Relief Gratings and Stable Birefringence Inscribed Using Light of Broad Spectral Range in Supramolecular Polymer-Bisazobenzene Complexes. Journal of Physical Chemistry C, 2012, 116, 2363-2370.	3.1	57

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37	Self-Assembly of a Functional Oligo(Aniline)-Based Amphiphile into Helical Conductive Nanowires. Journal of the American Chemical Society, 2015, 137, 14288-14294.	13.7	57
38	Conjugated Microporous Polymer Network Grafted Carbon Nanotube Fibers with Tunable Redox Activity for Efficient Flexible Wearable Energy Storage. Chemistry of Materials, 2020, 32, 8276-8285.	6.7	57
39	Towards functional nanostructures: Ionic self-assembly of polyoxometalates and surfactants. Current Opinion in Colloid and Interface Science, 2009, 14, 62-70.	7.4	56
40	Combination of ionic self-assembly and hydrogen bonding as a tool for the synthesis of liquid-crystalline materials and organogelators from a simple building blockElectronic supplementary information (ESI) available: IR, NMR, DSC and TGA data of the organic core and complexes. See http://www.rsc.org/suppdata/cc/b3/b303552b/. Chemical Communications, 2003, , 1958.	4.1	51
41	Reversible light-induced critical separation. Soft Matter, 2009, 5, 78-80.	2.7	47
42	Uniform Polyselenophene Block Copolymer Fiberlike Micelles and Block Co-micelles via Living Crystallization-Driven Self-Assembly. Macromolecules, 2018, 51, 1002-1010.	4.8	46
43	Delineating Poly(Aniline) Redox Chemistry by Using Tailored Oligo(Aryleneamine)s: Towards Oligo(Aniline)â€Based Organic Semiconductors with Tunable Optoelectronic Properties. Chemistry - A European Journal, 2011, 17, 12512-12521.	3.3	45
44	Structured oligo(aniline) nanofilms via ionic self-assembly. Soft Matter, 2012, 8, 2824-2832.	2.7	42
45	Living Supramolecular Polymerisation of Perylene Diimide Amphiphiles by Seeded Growth under Kinetic Control. Chemistry - A European Journal, 2018, 24, 15556-15565.	3.3	42
46	Supramolecular Polymerization from Controllable Fabrication to Living Polymerization. Macromolecular Rapid Communications, 2017, 38, 1700312.	3.9	41
47	Light-Triggered Soft Artificial Muscles:ÂMolecular-Level Amplification of Actuation Control Signals. Scientific Reports, 2017, 7, 9197.	3.3	41
48	Copperâ€"Metallomesogen Structures Obtained by Ionic Self-Assembly (ISA): Molecular Electromechanical Switching Driven by Cooperativity. Chemistry - A European Journal, 2003, 9, 3764-3771.	3.3	39
49	Selfâ€Assembled Polymeric Supramolecular Frameworks. Angewandte Chemie - International Edition, 2011, 50, 2516-2520.	13.8	39
50	Opportunities in Highâ€Speed Atomic Force Microscopy. Small, 2013, 9, 3201-3211.	10.0	39
51	Controlling the self-assembly of cationic bolaamphiphiles: counterion-directed transitions from 0D/1D to exclusively 2D planar structures. Chemical Science, 2013, 4, 4486.	7.4	37
52	Photoinduction of optical anisotropy in an azobenzene-containing ionic self-assembly liquid-crystalline material. Physical Review E, 2007, 75, 031703.	2.1	35
53	Tetragonal and Helical Morphologies from Polyferrocenylsilane Block Polyelectrolytes via Ionic Self-Assembly. Journal of the American Chemical Society, 2013, 135, 2455-2458.	13.7	35
54	Solid state nanofibers based on self-assemblies: from cleaving from self-assemblies to multilevel hierarchical constructs. Faraday Discussions, 2009, 143, 95.	3.2	34

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55	Helically structured metalâ€"organic frameworks fabricated by using supramolecular assemblies as templates. Chemical Science, 2015, 6, 1910-1916.	7.4	34
56	Organized Nanostructured Complexes of Inorganic Clusters and Surfactants That Exhibit Thermal Solid-State Transformations. Chemistry - A European Journal, 2003, 9, 2160-2166.	3.3	32
57	Fibrillar Constructs from Multilevel Hierarchical Selfâ€Assembly of Discotic and Calamitic Supramolecular Motifs. Advanced Functional Materials, 2008, 18, 2041-2047.	14.9	32
58	Self-assembly and pH response of electroactive liquid coreâ€"tetra(aniline) shell microcapsules. Journal of Materials Chemistry B, 2014, 2, 4720.	5.8	32
59	Exploiting Hansen solubility parameters to tune porosity and function in conjugated microporous polymers. Journal of Materials Chemistry A, 2020, 8, 22657-22665.	10.3	32
60	Luminescent and Swellable Conjugated Microporous Polymers for Detecting Nitroaromatic Explosives and Removing Harmful Organic Vapors. ACS Applied Materials & Interfaces, 2019, 11, 48352-48362.	8.0	31
61	Toward Direct Laser Writing of Actively Tuneable 3D Photonic Crystals. Advanced Optical Materials, 2017, 5, 1600458.	7.3	30
62	Surface controlled pseudo-capacitive reactions enabling ultra-fast charging and long-life organic lithium ion batteries. Sustainable Energy and Fuels, 2020, 4, 4179-4185.	4.9	30
63	Block-like electroactive oligo(aniline)s: anisotropic structures with anisotropic function. Journal of Materials Chemistry, 2012, 22, 16230.	6.7	29
64	Conductive, Monodisperse Polyaniline Nanofibers of Controlled Length Using Wellâ€Defined Cylindrical Block Copolymer Micelles as Templates. Chemistry - A European Journal, 2013, 19, 13030-13039.	3.3	28
65	Self-assembly of tetra(aniline) nanowires in acidic aqueous media with ultrasonic irradiation. Journal of Materials Chemistry C, 2015, 3, 11945-11952.	5.5	27
66	Solid-state nanostructure of PAMAM dendrimerâ€"fluorosurfactant complexes and nanoparticles synthesis within the ionic subphase. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 212, 115-121.	4.7	26
67	Highly ordered monodomain ionic self-assembled liquid-crystalline materials. Physical Review E, 2005, 71, 021701.	2.1	25
68	DNA-analogous structures from deoxynucleophosphates and polylysine by ionic self-assembly. Soft Matter, 2006, 2, 329.	2.7	25
69	Macroscopically Aligned Ionic Selfâ€Assembled Peryleneâ€Surfactant Complexes within a Polymer Matrix. Advanced Functional Materials, 2008, 18, 1890-1897.	14.9	24
70	Ionic self-assembled molecular receptor-based liquid crystals with tripeptide recognition capabilities. Journal of Materials Chemistry, 2008, 18, 2962.	6.7	24
71	Bolaamphiphiles Bearing Bipyridine as Mesogenic Core: Rational Exploitation of Molecular Architectures for Controlled Self-Assembly. Langmuir, 2012, 28, 5023-5030.	3.5	24
72	Oligo(aniline) nanofilms: from molecular architecture to microstructure. Soft Matter, 2013, 9, 10501.	2.7	24

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73	Redox-active mesomorphic complexes from the ionic self-assembly of cationic polyferrocenylsilane polyelectrolytes and anionic surfactants. Soft Matter, 2011, 7, 10462.	2.7	23
74	Hierarchical Organometallic Materials: Self-Assembly of Organicâ€“Organometallic Polyferrocenylsilane Block Polyelectrolyteâ€“Surfactant Complexes in Bulk and in Thin Films. Macromolecules, 2011, 44, 9324-9334.	4.8	23
75	Crosslinked porous polyimides: structure, properties and applications. Polymer Chemistry, 2021, 12, 6494-6514.	3.9	23
76	Influence of solvent polarity on the structure of drop-cast electroactive tetra(aniline)-surfactant thin films. Physical Chemistry Chemical Physics, 2016, 18, 24498-24505.	2.8	22
77	Chiral Perylene Materials by Ionic Self-Assembly. Langmuir, 2016, 32, 9023-9032.	3.5	21
78	Polymerization of the Organized Phases of Polyelectrolyteâ^'Surfactant Complexesâ€. Langmuir, 2003, 19, 6561-6565.	3.5	19
79	Calix[4]resorcinareneâ€“surfactant complexes: formulation, structure and potential sensor applications. Soft Matter, 2009, 5, 2746.	2.7	19
80	1D Selfâ€Assembly and Ice Recrystallization Inhibition Activity of Antifreeze Glycopeptideâ€Functionalized Perylene Bisimides. Chemistry - A European Journal, 2018, 24, 7834-7839.	3.3	19
81	An addressable packing parameter approach for reversibly tuning the assembly of oligo(aniline)-based supra-amphiphiles. Chemical Science, 2018, 9, 4392-4401.	7.4	18
82	Azobenzene isomerization in condensed matter: lessons for the design of efficient light-responsive soft-matter systems. Materials Advances, 2021, 2, 4152-4164.	5.4	18
83	Linear and Branched Fiber-like Micelles from the Crystallization-Driven Self-Assembly of Heterobimetallic Block Copolymer Polyelectrolyte/Surfactant Complexes. Macromolecules, 2019, 52, 7289-7300.	4.8	17
84	Directed Reactions within Confined Reaction Environments:â€‰ Polyadditions in Polyelectrolyteâ^'Surfactant Complexes. Macromolecules, 2003, 36, 2862-2866.	4.8	16
85	Langmuir and LB properties of two calix[4]resorcinarenes: Interactions with various analytes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 321, 43-46.	4.7	16
86	Double Smectic Self-Assembly in Block Copolypeptide Complexes. Biomacromolecules, 2012, 13, 3572-3580.	5.4	16
87	Tuning structure and function in tetra(aniline)-based rodâ€“coilâ€“rod architectures. Journal of Materials Chemistry C, 2013, 1, 6428.	5.5	16
88	Synthesis and Phase Characterization of a Double-Tailed Pyrrole-Containing Surfactant:Â A Novel Tecton for the Production of Functional Nanostructured Materials. Langmuir, 2005, 21, 2704-2712.	3.5	15
89	Exploring Redox States, Doping and Ordering of Electroactive Starâ€Shaped Oligo(aniline)s. Chemistry - A European Journal, 2016, 22, 16950-16956.	3.3	15
90	Controlling the Thermoelectric Properties of Organometallic Coordination Polymers via Ligand Design. Advanced Functional Materials, 2020, 30, 2003106.	14.9	15

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91	Directed Polymerization in Mesophases of Polyelectrolyteâ˘Surfactant Complexes. Langmuir, 2001, 17, 2031-2035.	3.5	14
92	Graphene oxide as a template for a complex functional oxide. CrystEngComm, 2015, 17, 6094-6097.	2.6	14
93	Tunable Surface Area, Porosity, and Function in Conjugated Microporous Polymers. Angewandte Chemie, 2019, 131, 11841-11845.	2.0	14
94	Design and Control of Perylene Supramolecular Polymers through Imide Substitutions. Chemistry - A European Journal, 2022, 28, .	3.3	14
95	Efficient and Controlled Seeded Growth of Poly(3-hexylthiophene) Block Copolymer Nanofibers through Suppression of Homogeneous Nucleation. Macromolecules, 2021, 54, 11269-11280.	4.8	14
96	Effect of Double-Tailed Surfactant Architecture on the Conformation, Self-Assembly, and Processing in Polypeptideâ˘Surfactant Complexes. Biomacromolecules, 2009, 10, 2787-2794.	5.4	13
97	Conductiveâ€AFM Patterning of Organic Semiconductors. Small, 2015, 11, 5054-5058.	10.0	13
98	Metal-free Synthesis of Pyridyl Conjugated Microporous Polymers for Photocatalytic Hydrogen Evolution. Chinese Journal of Polymer Science (English Edition), 2021, 39, 1004-1012.	3.8	13
99	Lysophosphatidic acid-functionalised titanium as a superior surface for supporting human osteoblast (MG63) maturation. , 2012, 23, 348-361.		13
100	Laserâ€Scribed Graphene Oxide Electrodes for Soft Electroactive Devices. Advanced Materials Technologies, 2019, 4, 1800232.	5.8	12
101	Liquid-Crystalline Materials by the Ionic Self-Assembly Route. Molecular Crystals and Liquid Crystals, 2006, 450, 55/[255]-65/[265].	0.9	11
102	Imaging the Predicted Isomerism of Oligo(aniline)s: A Scanning Tunneling Microscopy Study. Small, 2015, 11, 3430-3434.	10.0	11
103	Nucleotide-Based Templates for Nanoparticle Productionâ˘Exploiting Multiple Noncovalent Interactions. Chemistry of Materials, 2009, 21, 3270-3274.	6.7	10
104	Effect of Chain Length on the Interaction between Modified Organic Salts Containing Hydrocarbon Chains and Poly(N-isopropylacrylamide-co-acrylic acid) Microgel Particles. Langmuir, 2011, 27, 4362-4370.	3.5	9
105	Macrocyclic Amineâ€Linked Oligocarbazole Hollow Microspheres: Facile Synthesis and Efficient Lead Sorbents. Macromolecular Rapid Communications, 2014, 35, 1833-1839.	3.9	8
106	Electroactive Amphiphiles for Addressable Supramolecular Nanostructures. ChemNanoMat, 2018, 4, 741-752.	2.8	8
107	Structural relationships for the design of responsive azobenzene-based lyotropic liquid crystals. Physical Chemistry Chemical Physics, 2020, 22, 4086-4095.	2.8	8
108	Surface Patterning of Uniform 2D Platelet Block Comicelles via Coronal Chain Collapse. ACS Macro Letters, 2020, 9, 1514-1520.	4.8	7

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109	Tipping the polaronâ€“bipolaron balance: concentration and spin effects in doped oligo(aniline)s observed by UV-vis-NIR and TD-DFT. Molecular Systems Design and Engineering, 2019, 4, 103-109.	3.4	6
110	A Pyrrole-Containing Surfactant as a Tecton for Nanocomposite SiO2 Films. Langmuir, 2007, 23, 11273-11280.	3.5	5
111	3D printing with light: towards additive manufacturing of soft, electroactive structures. , 2018, , .		5
112	Thionated PDI supramolecular polymers: controlling aggregation mechanisms, morphology and function. Journal of Materials Chemistry C, 2022, 10, 2828-2837.	5.5	4
113	Bis[trimethyl(tetradecyl)ammonium] 7-hydroxy-8-phenyldiazenyl-7,8-dihydronaphthalene-1,3-disulfonate 1.8-hydrate: ionic self-assembly. Acta Crystallographica Section E: Structure Reports Online, 2004, 60, o1769-o1772.	0.2	2
114	Structureâ€“function relationship in optically and electronically active ISA materials. Synthetic Metals, 2004, 147, 63-65.	3.9	2
115	Modelling and Analysis of pH Responsive Hydrogels for the Development of Biomimetic Photo-Actuating Structures. Materials Research Society Symposia Proceedings, 2015, 1718, 65-70.	0.1	2
116	Monolayer behavior of calix-4-resorcinarenes and their surfactant complexes. Thin Solid Films, 2012, 520, 6989-6993.	1.8	1
117	Biomimetic photo-actuation: progress and challenges. , 2016, , .		1
118	Frontispiece: Design and Control of Perylene Supramolecular Polymers through Imide Substitutions. Chemistry - A European Journal, 2022, 28, .	3.3	1
119	Scanning Tunneling Microscopy: Imaging the Predicted Isomerism of Oligo(aniline)s: A Scanning Tunneling Microscopy Study (Small 28/2015). Small, 2015, 11, 3429-3429.	10.0	0
120	Soft Photochemical Actuation Systems: Tuning Performance Through Solvent Selection. , 2017, , .		0