## Fiona C Meldrum

List of Publications by Year in descending order

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166 papers 14,131 citations

20817 60 h-index 20961 115 g-index

171 all docs

171 docs citations

171 times ranked

12604 citing authors

| #  | Article  | IF           | CITATIONS |
|----|--|--------------|-----------|
| 1  | Crystallization by particle attachment in synthetic, biogenic, and geologic environments. Science, 2015, 349, aaa6760.   | 12.6         | 1,467     |
| 2  | Controlling Mineral Morphologies and Structures in Biological and Synthetic Systems. Chemical Reviews, 2008, 108, 4332-4432.   | 47.7         | 1,222     |
| 3  | The Colloid Chemical Approach to Nanostructured Materials. Advanced Materials, 1995, 7, 607-632.   | 21.0         | 745       |
| 4  | The role of magnesium in stabilising amorphous calcium carbonate and controlling calcite morphologies. Journal of Crystal Growth, 2003, 254, 206-218.  | 1.5          | 506       |
| 5  | Calcium carbonate in biomineralisation and biomimetic chemistry. International Materials Reviews, 2003, 48, 187-224.   | 19.3         | 455       |
| 6  | Synthesis of inorganic nanophase materials in supramolecular protein cages. Nature, 1991, 349, 684-687.  | 27.8         | 449       |
| 7  | Structure-property relationships of a biological mesocrystal in the adult sea urchin spine. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 3699-3704. | 7.1          | 277       |
| 8  | Dehydration and crystallization of amorphous calcium carbonate in solution and in air. Nature Communications, 2014, 5, 3169.   | 12.8         | 265       |
| 9  | Morphological influence of magnesium and organic additives on the precipitation of calcite. Journal of Crystal Growth, 2001, 231, 544-558.   | 1.5          | 257       |
| 10 | An artificial biomineral formed by incorporation of copolymer micelles in calcite crystals. Nature Materials, 2011, 10, 890-896.   | <b>27.</b> 5 | 248       |
| 11 | Continuous Structural Evolution of Calcium Carbonate Particles:Â A Unifying Model of Copolymer-Mediated Crystallization. Journal of the American Chemical Society, 2007, 129, 3729-3736.           | 13.7         | 240       |
| 12 | Epitaxial Growth of Size-Quantized Cadmium Sulfide Crystals Under Arachidic Acid Monolayers. The Journal of Physical Chemistry, 1995, 99, 5500-5504.   | 2.9          | 208       |
| 13 | Reconstitution of manganese oxide cores in horse spleen and recombinant ferritins. Journal of Inorganic Biochemistry, 1995, 58, 59-68.   | 3.5          | 187       |
| 14 | Tuning hardness in calcite by incorporation of amino acids. Nature Materials, 2016, 15, 903-910.   | 27.5         | 183       |
| 15 | Synthesis-dependant structural variations in amorphous calcium carbonate. CrystEngComm, 2007, 9, 1226.   | 2.6          | 164       |
| 16 | Crystallization in Confinement. Advanced Materials, 2020, 32, e2001068.  | 21.0         | 158       |
| 17 | Amorphous Calcium Carbonate is Stabilized in Confinement. Advanced Functional Materials, 2010, 20, 2108-2115.  | 14.9         | 157       |
| 18 | Synthesis of Single Crystals of Calcite with Complex Morphologies. Advanced Materials, 2002, 14, 1167.   | 21.0         | 153       |

| #  | Article  | IF   | Citations |
|----|--|------|-----------|
| 19 | Precipitation of Calcium Carbonate in Confinement. Advanced Functional Materials, 2004, 14, 1211-1220.   | 14.9 | 145       |
| 20 | A new precipitation pathway for calcium sulfate dihydrate (gypsum) via amorphous and hemihydrate intermediates. Chemical Communications, 2012, 48, 504-506.                          | 4.1  | 143       |
| 21 | Three-dimensional imaging of dislocation propagation during crystal growth and dissolution. Nature Materials, 2015, 14, 780-784.   | 27.5 | 143       |
| 22 | Think Positive: Phase Separation Enables a Positively Charged Additive to Induce Dramatic Changes in Calcium Carbonate Morphology. Advanced Functional Materials, 2012, 22, 907-915. | 14.9 | 128       |
| 23 | Controlling the fluorescence and room-temperature phosphorescence behaviour of carbon nanodots with inorganic crystalline nanocomposites. Nature Communications, 2019, 10, 206.      | 12.8 | 128       |
| 24 | Bioâ€Inspired Synthesis and Mechanical Properties of Calcite–Polymer Particle Composites. Advanced Materials, 2010, 22, 2082-2086.   | 21.0 | 122       |
| 25 | A critical analysis of calcium carbonate mesocrystals. Nature Communications, 2014, 5, 4341.   | 12.8 | 122       |
| 26 | Utilization of Surfactant-Stabilized Colloidal Silver Nanocrystallites in the Construction of Monoand Multiparticulate Langmuir-Blodgett Films. Langmuir, 1994, 10, 2035-2040.       | 3.5  | 114       |
| 27 | Control of calcium carbonate morphology by transformation of an amorphous precursor in a constrained volume. Chemical Communications, 2001, , 901-902.                               | 4.1  | 114       |
| 28 | Elucidating Mechanisms of Diffusionâ€Based Calcium Carbonate Synthesis Leads to Controlled Mesocrystal Formation. Advanced Functional Materials, 2013, 23, 1965-1973.                | 14.9 | 114       |
| 29 | Porous gold structures through templating by echinoid skeletal plates. Chemical Communications, 2000, , 29-30.   | 4.1  | 111       |
| 30 | Study of Calcium Carbonate Precipitation under a Series of Fatty Acid Langmuir Monolayers Using Brewster Angle Microscopy. Langmuir, 2003, 19, 2830-2837.                            | 3.5  | 110       |
| 31 | Direct observation of mineral–organic composite formation reveals occlusion mechanism. Nature Communications, 2016, 7, 10187.  | 12.8 | 110       |
| 32 | Monoparticulate Layers of Titanium Dioxide Nanocrystallites with Controllable Interparticle Distances. The Journal of Physical Chemistry, 1994, 98, 8827-8830.                       | 2.9  | 106       |
| 33 | Early Stages of Crystallization of Calcium Carbonate Revealed in Picoliter Droplets. Journal of the American Chemical Society, 2011, 133, 5210-5213.                                 | 13.7 | 105       |
| 34 | Nanostructured Calcite Single Crystals with Gyroid Morphologies. Advanced Materials, 2009, 21, 3928-3932.  | 21.0 | 103       |
| 35 | Now You See Them. Science, 2008, 322, 1802-1803.   | 12.6 | 101       |
| 36 | Nanoscale Confinement Controls the Crystallization of Calcium Phosphate: Relevance to Bone Formation. Chemistry - A European Journal, 2013, 19, 14918-14924.                         | 3.3  | 95        |

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| 37 | The Effect of Additives on Amorphous Calcium Carbonate (ACC): Janus Behavior in Solution and the Solid State. Advanced Functional Materials, 2013, 23, 1575-1585.  | 14.9 | 95        |
| 38 | Chemical Deposition of PbS on Self-Assembled Monolayers of 16-Mercaptohexadecanoic Acid. Langmuir, 1997, 13, 2033-2049.  | 3.5  | 93        |
| 39 | Capillarity Creates Singleâ€Crystal Calcite Nanowires from Amorphous Calcium Carbonate. Angewandte Chemie - International Edition, 2011, 50, 12572-12577.  | 13.8 | 90        |
| 40 | Intermolecular channels direct crystal orientation in mineralized collagen. Nature Communications, 2020, 11, 5068.   | 12.8 | 90        |
| 41 | A solvothermal route to capped nanoparticles of $\hat{I}^3$ -Fe2O3 and CoFe2O4. Journal of Materials Chemistry, 2001, 11, 3215-3221.   | 6.7  | 87        |
| 42 | High-speed imaging of ice nucleation in water proves the existence of active sites. Science Advances, 2019, 5, eaav4316.   | 10.3 | 87        |
| 43 | Spreading of Clay Organocomplexes on Aqueous Solutions: Construction of Langmuir-Blodgett Clay Organocomplex Multilayer Films. Langmuir, 1994, 10, 3797-3804.  | 3.5  | 85        |
| 44 | Is Ice Nucleation from Supercooled Water Insensitive to Surface Roughness?. Journal of Physical Chemistry C, 2015, 119, 1164-1169.   | 3.1  | 85        |
| 45 | Overproduction, purification and characterization of the Escherichia coli ferritin. FEBS Journal, 1993, 218, 985-995.  | 0.2  | 82        |
| 46 | Synthesis of controlled-structure sulfate-based copolymers via atom transfer radical polymerisation and their use as crystal habit modifiers for BaSO4. Journal of Materials Chemistry, 2002, 12, 890-896.       | 6.7  | 79        |
| 47 | One-pot synthesis of an inorganic heterostructure: uniform occlusion of magnetite nanoparticles within calcite single crystals. Chemical Science, 2014, 5, 738-743.  | 7.4  | 75        |
| 48 | Bioskeletons as Templates for Ordered, Macroporous Structures. Advanced Materials, 2000, 12, 1149-1151.  | 21.0 | 74        |
| 49 | Additives stabilize calcium sulfate hemihydrate (bassanite) in solution. Journal of Materials Chemistry, 2012, 22, 22055.  | 6.7  | 73        |
| 50 | Designer Crystals: Â Single Crystals with Complex Morphologies. Chemistry of Materials, 2007, 19, 1111-1119.   | 6.7  | 72        |
| 51 | Systematic Study of the Effects of Polyamines on Calcium Carbonate Precipitation. Chemistry of Materials, 2014, 26, 2703-2711.   | 6.7  | 72        |
| 52 | Shape-constraint as a route to calcite single crystals with complex morphologies. Journal of Materials Chemistry, 2004, 14, 2291.  | 6.7  | 71        |
| 53 | The role of poly(aspartic acid) in the precipitation of calcium phosphate in confinement. Journal of Materials Chemistry B, 2013, 1, 6586.   | 5.8  | 67        |
| 54 | Occlusion of Sulfate-Based Diblock Copolymer Nanoparticles within Calcite: Effect of Varying the Surface Density of Anionic Stabilizer Chains. Journal of the American Chemical Society, 2016, 138, 11734-11742. | 13.7 | 67        |

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|----|--|------|-----------|
| 55 | Combinatorial microfluidic droplet engineering for biomimetic material synthesis. Science Advances, 2016, 2, e1600567.   | 10.3 | 67        |
| 56 | Observing the formation of ice and organic crystals in active sites. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 810-815.                                    | 7.1  | 66        |
| 57 | High-Magnesian Calcite Mesocrystals: A Coordination Chemistry Approach. Journal of the American Chemical Society, 2012, 134, 1367-1373.  | 13.7 | 65        |
| 58 | Structure and Properties of Nanocomposites Formed by the Occlusion of Block Copolymer Worms and Vesicles Within Calcite Crystals. Advanced Functional Materials, 2016, 26, 1382-1392.                        | 14.9 | 63        |
| 59 | The role of phase separation and related topography in the exceptional ice-nucleating ability of alkali feldspars. Physical Chemistry Chemical Physics, 2017, 19, 31186-31193.                               | 2.8  | 63        |
| 60 | Model Anionic Block Copolymer Vesicles Provide Important Design Rules for Efficient Nanoparticle Occlusion within Calcite. Journal of the American Chemical Society, 2019, 141, 2557-2567.                   | 13.7 | 63        |
| 61 | In Situ Study of the Precipitation and Crystallization of Amorphous Calcium Carbonate (ACC). Crystal Growth and Design, 2012, 12, 1212-1217.   | 3.0  | 61        |
| 62 | Confinement generates single-crystal aragonite rods at room temperature. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7670-7675.                              | 7.1  | 61        |
| 63 | Controlled synthesis of inorganic materials using supramolecular assemblies. Advanced Materials, 1991, 3, 316-318.   | 21.0 | 60        |
| 64 | Characterization of the manganese core of reconstituted ferritin by x-ray absorption spectroscopy. Journal of the American Chemical Society, 1993, 115, 8471-8472.   | 13.7 | 60        |
| 65 | Freeze-drying yields stable and pure amorphous calcium carbonate (ACC). Chemical Communications, 2013, 49, 3134.   | 4.1  | 60        |
| 66 | Oxygen Spectroscopy and Polarization-Dependent Imaging Contrast (PIC)-Mapping of Calcium Carbonate Minerals and Biominerals. Journal of Physical Chemistry B, 2014, 118, 8449-8457.                          | 2.6  | 60        |
| 67 | A solvothermal route to capped CdSe nanoparticles. Chemical Communications, 2001, , 629-630.   | 4.1  | 58        |
| 68 | Phosphonic Acid-Functionalized Diblock Copolymer Nano-Objects via Polymerization-Induced Self-Assembly: Synthesis, Characterization, and Occlusion into Calcite Crystals. Macromolecules, 2016, 49, 192-204. | 4.8  | 58        |
| 69 | Confinement Leads to Control over Calcium Sulfate Polymorph. Advanced Functional Materials, 2013, 23, 5615-5623.   | 14.9 | 56        |
| 70 | Profiting from nature: macroporous copper with superior mechanical properties. Chemical Communications, 2007, , 3547.  | 4.1  | 53        |
| 71 | Precipitation of Amorphous Calcium Oxalate in Aqueous Solution. Chemistry of Materials, 2015, 27, 3999-4007.   | 6.7  | 53        |
| 72 | Two-dimensional silver electrocrystallization under monolayers spread on aqueous silver nitrate. Langmuir, 1993, 9, 3710-3716.   | 3.5  | 52        |

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| 73 | Structural and physiological effects of calcium and magnesium in Emiliania huxleyi (Lohmann) Hay and Mohler. Journal of Structural Biology, 2004, 148, 307-314.                                    | 2.8  | 49        |
| 74 | Topographical Control of Crystal Nucleation. Crystal Growth and Design, 2012, 12, 750-755.   | 3.0  | 49        |
| 75 | Confinement Increases the Lifetimes of Hydroxyapatite Precursors. Chemistry of Materials, 2014, 26, 5830-5838.   | 6.7  | 48        |
| 76 | Colouring crystals with inorganic nanoparticles. Chemical Communications, 2014, 50, 67-69.   | 4.1  | 48        |
| 77 | Macroporous inorganic solids from a biomineral template. Journal of Crystal Growth, 2006, 294, 69-77.  | 1.5  | 47        |
| 78 | Polymer-induced liquid precursor (PILP) phases of calcium carbonate formed in the presence of synthetic acidic polypeptidesâ€"relevance to biomineralization. Faraday Discussions, 2012, 159, 327. | 3.2  | 47        |
| 79 | The Effect of Additives on the Early Stages of Growth of Calcite Single Crystals. Angewandte Chemie -<br>International Edition, 2017, 56, 11885-11890.   | 13.8 | 46        |
| 80 | Template-Directed Control of Crystal Morphologies. Macromolecular Bioscience, 2007, 7, 152-162.  | 4.1  | 44        |
| 81 | Formation of patterned PbS and ZnS films on self-assembled monolayers. Thin Solid Films, 1999, 348, 188-195.   | 1.8  | 43        |
| 82 | Calcium carbonate polymorph control using droplet-based microfluidics. Biomicrofluidics, 2012, 6, 22001-2200110.   | 2.4  | 43        |
| 83 | Confinement stabilises single crystal vaterite rods. Chemical Communications, 2014, 50, 4729-4732.   | 4.1  | 43        |
| 84 | Hydroxyl-rich macromolecules enable the bio-inspired synthesis of single crystal nanocomposites. Nature Communications, 2019, 10, 5682.  | 12.8 | 43        |
| 85 | Gold Particulate Film Formation under Monolayers. The Journal of Physical Chemistry, 1995, 99, 9869-9875.  | 2.9  | 42        |
| 86 | Growth of single crystals in structured templates. Journal of Materials Chemistry, 2006, 16, 408-416.  | 6.7  | 41        |
| 87 | Strain-relief by single dislocation loops in calcite crystals grown on self-assembled monolayers.<br>Nature Communications, 2016, 7, 11878.  | 12.8 | 41        |
| 88 | The Crystal Hotel: A Microfluidic Approach to Biomimetic Crystallization. Advanced Materials, 2015, 27, 7395-7400.   | 21.0 | 40        |
| 89 | 3D visualization of additive occlusion and tunable full-spectrum fluorescence in calcite. Nature Communications, 2016, 7, 13524.   | 12.8 | 40        |
| 90 | Anisotropic nano-papier mache microcapsules. Soft Matter, 2007, 3, 188-190.  | 2.7  | 39        |

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|-----|--|------|-----------|
| 91  | Formation and Structure of Calcium Carbonate Thin Films and Nanofibers Precipitated in the Presence of Poly(Allylamine Hydrochloride) and Magnesium Ions. Chemistry of Materials, 2013, 25, 4994-5003. | 6.7  | 39        |
| 92  | Chemical deposition of PbS on a series of $\ddot{l}$ %-functionalised self-assembled monolayers. Journal of Materials Chemistry, 1999, 9, 711-723.   | 6.7  | 37        |
| 93  | Anionic block copolymer vesicles act as Trojan horses to enable efficient occlusion of guest species into host calcite crystals. Chemical Science, 2018, 9, 8396-8401.                                 | 7.4  | 37        |
| 94  | What Dictates the Spatial Distribution of Nanoparticles within Calcite?. Journal of the American Chemical Society, 2019, 141, 2481-2489.   | 13.7 | 37        |
| 95  | Crystallization on Surfaces of Well-Defined Topography. Langmuir, 2006, 22, 1955-1958.   | 3.5  | 36        |
| 96  | Porous Single Crystals of Calcite from Colloidal Crystal Templates: ACC Is Not Required for Nanoscale Templating. Advanced Functional Materials, 2011, 21, 948-954.                                    | 14.9 | 36        |
| 97  | Amino Acid Assisted Incorporation of Dye Molecules within Calcite Crystals. Angewandte Chemie -<br>International Edition, 2018, 57, 8623-8628.   | 13.8 | 36        |
| 98  | Bio-inspired formation of functional calcite/metal oxide nanoparticle composites. Nanoscale, 2014, 6, 852-859.   | 5.6  | 35        |
| 99  | Spatially Controlled Occlusion of Polymerâ€Stabilized Gold Nanoparticles within ZnO. Angewandte Chemie - International Edition, 2019, 58, 4302-4307.   | 13.8 | 35        |
| 100 | Bioinspired Polymer–Inorganic Hybrid Materials. Advanced Materials, 2006, 18, 2270-2273.   | 21.0 | 33        |
| 101 | Efficient Selection of Biomineralizing DNA Aptamers Using Deep Sequencing and Population Clustering. ACS Nano, 2014, 8, 387-395.   | 14.6 | 33        |
| 102 | Bioinspired Synthesis of Large-Pore, Mesoporous Hydroxyapatite Nanocrystals for the Controlled Release of Large Pharmaceutics. Crystal Growth and Design, 2015, 15, 723-731.                           | 3.0  | 32        |
| 103 | Biomineralization: Biomimetic Potential at the Inorganic-Organic Interface. MRS Bulletin, 1992, 17, 32-36.   | 3.5  | 31        |
| 104 | Substrate-directed formation of calcium carbonate fibres. Journal of Materials Chemistry, 2009, 19, 387-398.   | 6.7  | 31        |
| 105 | Droplet Microfluidics XRD Identifies Effective Nucleating Agents for Calcium Carbonate. Advanced Functional Materials, 2019, 29, 1808172.  | 14.9 | 31        |
| 106 | Passive Picoinjection Enables Controlled Crystallization in a Droplet Microfluidic Device. Small, 2017, 13, 1702154.   | 10.0 | 29        |
| 107 | Influence of Membrane Composition on the Intravesicular Precipitation of Nanophase Gold Particles. Journal of Colloid and Interface Science, 1993, 161, 66-71.   | 9.4  | 28        |
| 108 | Formation of Thin Films of Platinum, Palladium, and Mixed Platinum: Palladium Nanocrystallites by the Langmuir Monolayer Technique. Chemistry of Materials, 1995, 7, 1112-1116.                        | 6.7  | 27        |

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|-----|---|------|-----------|
| 109 | The use of cationic surfactants to control the structure of zinc oxide films prepared by chemical vapour deposition. Chemical Communications, 2012, 48, 1490-1492.  | 4.1  | 27        |
| 110 | How Many Phosphoric Acid Units Are Required to Ensure Uniform Occlusion of Sterically Stabilized Nanoparticles within Calcite?. Angewandte Chemie - International Edition, 2019, 58, 8692-8697.             | 13.8 | 27        |
| 111 | Visualization of the effect of additives on the nanostructures of individual bio-inspired calcite crystals. Chemical Science, 2019, 10, 1176-1185.  | 7.4  | 26        |
| 112 | Polymer-Directed Assembly of Single Crystal Zinc Oxide/Magnetite Nanocomposites under Atmospheric and Hydrothermal Conditions. Chemistry of Materials, 2016, 28, 7528-7536.                                 | 6.7  | 25        |
| 113 | Rapid Screening of Calcium Carbonate Precipitation in the Presence of Amino Acids: Kinetics, Structure, and Composition. Crystal Growth and Design, 2016, 16, 5174-5183.                                    | 3.0  | 24        |
| 114 | Rapid preparation of highly reliable PDMS double emulsion microfluidic devices. RSC Advances, 2016, 6, 25927-25933.   | 3.6  | 24        |
| 115 | Synchrotron FTIR mapping of mineralization in a microfluidic device. Lab on A Chip, 2017, 17, 1616-1624.  | 6.0  | 24        |
| 116 | Epitaxy of Calcite on Mica. Crystal Growth and Design, 2010, 10, 734-738.   | 3.0  | 23        |
| 117 | Effect of Nanoscale Confinement on the Crystallization of Potassium Ferrocyanide. Crystal Growth and Design, 2016, 16, 5403-5411.   | 3.0  | 22        |
| 118 | Using Confinement To Study the Crystallization Pathway of Calcium Carbonate. Crystal Growth and Design, 2017, 17, 6787-6792.  | 3.0  | 22        |
| 119 | Influence of the Structure of Block Copolymer Nanoparticles on the Growth of Calcium Carbonate.<br>Chemistry of Materials, 2018, 30, 7091-7099.   | 6.7  | 22        |
| 120 | Active sites for ice nucleation differ depending on nucleation mode. Proceedings of the National Academy of Sciences of the United States of America, 2021, $118$ , .                                       | 7.1  | 22        |
| 121 | Particles on Melt-Cut Mica Sheets Are Platinum. Langmuir, 2003, 19, 975-976.  | 3.5  | 21        |
| 122 | Solid state crystallization of amorphous calcium carbonate nanoparticles leads to polymorph selectivity. CrystEngComm, 2013, 15, 697-705.   | 2.6  | 21        |
| 123 | Synthesis of Macroporous Calcium Carbonate/Magnetite Nanocomposites and their Application in Photocatalytic Water Splitting. Small, 2011, 7, 2168-2172.   | 10.0 | 20        |
| 124 | Physical Confinement Promoting Formation of Cu <sub>2</sub> O–Au Heterostructures with Au Nanoparticles Entrapped within Crystalline Cu <sub>2</sub> O Nanorods. Chemistry of Materials, 2017, 29, 555-563. | 6.7  | 20        |
| 125 | Combinatorial Evolution of Biomimetic Magnetite Nanoparticles. Advanced Functional Materials, 2017, 27, 1604863.  | 14.9 | 19        |
| 126 | Crystallization and formation mechanisms of nanostructures. Nanoscale, 2010, 2, 2326.   | 5.6  | 18        |

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| 127 | Efficient occlusion of oil droplets within calcite crystals. Chemical Science, 2019, 10, 8964-8972.   | 7.4  | 18        |
| 128 | Ptychographic X-ray tomography reveals additive zoning in nanocomposite single crystals. Chemical Science, 2020, 11, 355-363.   | 7.4  | 17        |
| 129 | Characterization of Preferred Crystal Nucleation Sites on Mica Surfaces. Crystal Growth and Design, 2013, 13, 1915-1925.  | 3.0  | 16        |
| 130 | A reproducible approach to the assembly of microcapillaries for double emulsion production. Microfluidics and Nanofluidics, 2016, 20, 1.  | 2.2  | 16        |
| 131 | Genetic Algorithmâ€Guided Discovery of Additive Combinations That Direct Quantum Dot Assembly. Advanced Materials, 2015, 27, 223-227.   | 21.0 | 14        |
| 132 | Ultra-thin particulate films prepared from capped and uncapped reverse-micelle-entrapped silver particles. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 673.                    | 1.7  | 12        |
| 133 | Simple Photosystem II Water Oxidation Centre Analogues in Visible Light Oxygen and H <sup>+</sup> Generation. Small, 2013, 9, 61-66.  | 10.0 | 12        |
| 134 | The Effect of Additives on the Early Stages of Growth of Calcite Single Crystals. Angewandte Chemie, 2017, 129, 12047-12052.  | 2.0  | 12        |
| 135 | Dynamic Crystallization Pathways of Polymorphic Pharmaceuticals Revealed in Segmented Flow with Inline Powder X-ray Diffraction. Analytical Chemistry, 2020, 92, 7754-7761.                         | 6.5  | 12        |
| 136 | Incorporation of nanogels within calcite single crystals for the storage, protection and controlled release of active compounds. Chemical Science, 2021, 12, 9839-9850.                             | 7.4  | 12        |
| 137 | Exploiting Confinement to Study the Crystallization Pathway of Calcium Sulfate. Advanced Functional Materials, 2021, 31, 2107312.   | 14.9 | 11        |
| 138 | Skin-Deep Surface Patterning of Calcite. Chemistry of Materials, 2019, 31, 8725-8733.   | 6.7  | 10        |
| 139 | An innovative data processing method for studying nanoparticle formation in droplet microfluidics using X-rays scattering. Lab on A Chip, 2021, 21, 4498-4506.                                      | 6.0  | 10        |
| 140 | Magnesium Ions Direct the Solidâ€State Transformation of Amorphous Calcium Carbonate Thin Films to Aragonite, Magnesiumâ€Calcite, or Dolomite. Advanced Functional Materials, 2022, 32, .           | 14.9 | 10        |
| 141 | Positively Charged Additives Facilitate Incorporation in Inorganic Single Crystals. Chemistry of Materials, 2022, 34, 4910-4923.  | 6.7  | 10        |
| 142 | Biopolymer stabilized nanoparticles as co-catalysts for photocatalytic water oxidations. Polymer Chemistry, 2011, 2, 1375.  | 3.9  | 9         |
| 143 | Cooperative Effects of Confinement and Surface Functionalization Enable the Formation of Au/Cu <sub>2</sub> 0 Metal–Semiconductor Heterostructures. Crystal Growth and Design, 2016, 16, 6804-6811. | 3.0  | 9         |
| 144 | Spatially Controlled Occlusion of Polymerâ€Stabilized Gold Nanoparticles within ZnO. Angewandte Chemie, 2019, 131, 4346-4351.   | 2.0  | 9         |

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|-----|---|------|-----------|
| 145 | A facile method for generating worm-like micelles with controlled lengths and narrow polydispersity. Chemical Communications, 2020, 56, 7463-7466.  | 4.1  | 9         |
| 146 | Investigating the Nucleation Kinetics of Calcium Carbonate Using a Zero-Water-Loss Microfluidic Chip. Crystal Growth and Design, 2020, 20, 2787-2795.   | 3.0  | 9         |
| 147 | Embracing Mechanobiology in Next Generation Organ-On-A-Chip Models of Bone Metastasis. Frontiers in Medical Technology, 2021, 3, 722501.  | 2.5  | 9         |
| 148 | Solvent-Mediated Enhancement of Additive-Controlled Crystallization. Crystal Growth and Design, 2021, 21, 7104-7115.  | 3.0  | 9         |
| 149 | General Route to Functional Metal Oxide Nanosuspensions, Enzymatically Deshelled Nanoparticles, and Their Application in Photocatalytic Water Splitting. Small, 2011, 7, 869-873.                                 | 10.0 | 8         |
| 150 | Correlation between Anisotropy and Lattice Distortions in Single Crystal Calcite Nanowires Grown in Confinement. Small, 2014, 10, 2697-2702.  | 10.0 | 8         |
| 151 | Superâ€Resolution Microscopy Reveals Shape and Distribution of Dislocations in Singleâ€Crystal Nanocomposites. Angewandte Chemie - International Edition, 2019, 58, 17328-17334.                                  | 13.8 | 8         |
| 152 | Starfish grow extraordinary crystals. Science, 2022, 375, 615-616.  | 12.6 | 8         |
| 153 | How Many Phosphoric Acid Units Are Required to Ensure Uniform Occlusion of Sterically Stabilized Nanoparticles within Calcite?. Angewandte Chemie, 2019, 131, 8784-8789.  | 2.0  | 7         |
| 154 | The archaeal lipid composition of partially lithified cold seep mats. Organic Geochemistry, 2008, 39, 1000-1006.  | 1.8  | 6         |
| 155 | Dichroic Calcite Reveals the Pathway from Additive Binding to Occlusion. Crystal Growth and Design, 2021, 21, 3746-3755.  | 3.0  | 5         |
| 156 | Micron-sized biogenic and synthetic hollow mineral spheres occlude additives within single crystals. Faraday Discussions, 2022, 235, 536-550.   | 3.2  | 4         |
| 157 | Impurities in pluronic triblock copolymers can induce the formation of calcite mesocrystals. Chemical Geology, 2012, 294-295, 259-262.  | 3.3  | 3         |
| 158 | Evaluation of microflow configurations for scale inhibition and serial X-ray diffraction analysis of crystallization processes. Lab on A Chip, 2020, 20, 2954-2964.   | 6.0  | 3         |
| 159 | Calcite Kinetics for Spiral Growth and Two-Dimensional Nucleation. Crystal Growth and Design, 2022, 22, 4431-4436.  | 3.0  | 3         |
| 160 | Iron Biomineralization in the PoriferanIrcinia Oros. Journal of the Marine Biological Association of the United Kingdom, 1995, 75, 993-996.   | 0.8  | 2         |
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