# Gil Goobes

List of Publications by Year
in descending order



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|---|---|---|---|
| 55 papers | 1,705 citations | 331670 21 h-index | 289244 40 g-index |
| 58 all docs | 58 docs citations | 58 times ranked | 2399 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Cu<sup>2+</sup>-Induced self-assembly and amyloid formation of a cyclic <scp>d</scp>,<scp>l</scp>-Î±-peptide: structure and function. Physical Chemistry Chemical Physics, 2022, 24, 6699-6715. | 2.8 | 3 |
| 2 | Molecular differences in collagen organization and in organic-inorganic interfacial structure of bones with and without osteocytes. Acta Biomaterialia, 2022, 144, 195-209. | 8.3 | 9 |
| 3 | Biogenic Guanine Crystals Are Solid Solutions of Guanine and Other Purine Metabolites. Journal of the American Chemical Society, 2022, 144, 5180-5189. | 13.7 | 26 |
| 4 | Sourcing Herod the Great's calcite-alabaster bathtubs by a multi-analytic approach. Scientific Reports, 2022, 12, 7524. | 3.3 | 0 |
| 5 | Lysozyme is Sterically Trapped Within the Silica Cage in Bioinspired Silicaâ€“Lysozyme Composites: A Multi-Technique Understanding of Elusive Proteinâ€“Material Interactions. Langmuir, 2022, 38, 8030-8037. | 3.5 | 4 |
| 6 | Electrochemical and Thermal Behavior of Modified Li and Mnâ€Rich Cathode Materials in Battery Prototypes: Impact of Pentasodium Aluminate Coating and Comprehensive Understanding of Its Evolution upon Cycling through Solidâ€State Nuclear Magnetic Resonance Analysis. Advanced Energy and Sustainability Research, 2021, 2, 2000089. | 5.8 | 8 |
| 7 | Alumina thin coat on pre-charged soft carbon anode reduces electrolyte breakdown and maintains sodiation sites active in Na-ion battery â€“ Insights from NMR measurements. Journal of Solid State Chemistry, 2021, 298, 122121. | 2.9 | 8 |
| 8 | Molecular Layer Deposition of Alucone Thin Film on LiCoO<sub>2</sub> to Enable High Voltage Operation. Batteries and Supercaps, 2021, 4, 1739-1748. | 4.7 | 8 |
| 9 | Structure and Dynamics Perturbations in Ubiquitin Adsorbed or Entrapped in Silica Materials Are Related to Disparate Surface Chemistries Resolved by Solid-State NMR Spectroscopy. Biomacromolecules, 2021, 22, 3718-3730. | 5.4 | 4 |
| 10 | Osteopontin regulates biomimetic calcium phosphate crystallization from disordered mineral layers covering apatite crystallites. Scientific Reports, 2020, 10, 15722. | 3.3 | 23 |
| 11 | Siliplant1 protein precipitates silica in sorghum silica cells. Journal of Experimental Botany, 2020, 71, 6830-6843. | 4.8 | 34 |
| 12 | New aqueous energy storage devices comprising graphite cathodes, MXene anodes and concentrated sulfuric acid solutions. Energy Storage Materials, 2020, 32, 1-10. | 18.0 | 32 |
| 13 | Linking structure to performance of Li<sub>1.2</sub>Mn<sub>0.54</sub>Ni<sub>0.13</sub>Co<sub>0.13</sub>O<sub>2</sub> (Li and Mn) Tj ETQq1 1 0.784314 rgBT / 2020, 22, 9098-9109. | 2.8 | 22 |
| 14 | Peptides from diatoms and grasses harness phosphate ion binding to silica to help regulate biomaterial structure. Acta Biomaterialia, 2020, 112, 286-297. | 8.3 | 6 |
| 15 | How does osteocalcin lacking Î³-glutamic groups affect biomimetic apatite formation and what can we say about its structure in mineral-bound form?. Journal of Structural Biology, 2019, 207, 104-114. | 2.8 | 12 |
| 16 | Dynamics in hydrophilic and hydrophobic molecular chains tethered to MCM41-type mesoporous silica upon wetting and dehydration processes. Solid State Nuclear Magnetic Resonance, 2019, 98, 24-35. | 2.3 | 1 |
| 17 | Spectroscopic Discrimination of Sorghum Silica Phytoliths. Frontiers in Plant Science, 2019, 10, 1571. | 3.6 | 18 |
| 18 | The Coral Protein CARP3 Acts from a Disordered Mineral Surface Film to Divert Aragonite Crystallization in Favor of Mgâ€Calcite. Advanced Functional Materials, 2018, 28, 1707321. | 14.9 | 19 |

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|---|---|---|---|
| 19 | Understanding the roles of functional peptides in designing apatite and silica nanomaterials biomimetically using NMR techniques. Current Opinion in Colloid and Interface Science, 2018, 33, 44-52. | 7.4 | 14 |
| 20 | Ammonia Treatment of 0.35Li<sub>2</sub>MnO<sub>3</sub>Â·0.65LiNi<sub>0.35</sub>Mn<sub>0.45</sub>Co<sub>0.20</sub>O<sub>2</sub> Material: Insights from Solid-State NMR Analysis. Journal of Physical Chemistry C, 2018, 122, 3773-3779. | 3.1 | 19 |
| 21 | Engineering <scp>l</scp>-asparaginase for spontaneous formation of calcium phosphate bioinspired microreactors. Physical Chemistry Chemical Physics, 2018, 20, 12719-12726. | 2.8 | 9 |
| 22 | Pushing the limit of layered transition metal oxide cathodes for high-energy density rechargeable Li ion batteries. Energy and Environmental Science, 2018, 11, 1271-1279. | 30.8 | 322 |
| 23 | A REDOR ssNMR Investigation of the Role of an N-Terminus Lysine in R5 Silica Recognition. Langmuir, 2018, 34, 8678-8684. | 3.5 | 15 |
| 24 | Reply to: Characterizing coral skeleton mineralogy with Raman spectroscopy. Nature Communications, 2018, 9, 5324. | 12.8 | 3 |
| 25 | Minerals in the pre-settled coral Stylophora pistillata crystallize via protein and ion changes. Nature Communications, 2018, 9, 1880. | 12.8 | 53 |
| 26 | NMR-Detected Dynamics of Sodium Co-Intercalation with Diglyme Solvent Molecules in Graphite Anodes Linked to Prolonged Cycling. Journal of Physical Chemistry C, 2018, 122, 21172-21184. | 3.1 | 27 |
| 27 | Ubiquitin immobilized on mesoporous MCM41 silica surfaces â€“ Analysis by solid-state NMR with biophysical and surface characterization. Biointerphases, 2017, 12, 02D414. | 1.6 | 13 |
| 28 | Polyoxometalates entrapped in solâ€“gel matrices for reducing electron exchange column applications. Journal of Coordination Chemistry, 2016, 69, 3449-3457. | 2.2 | 6 |
| 29 | LiNi<sub>0.8</sub>Co<sub>0.15</sub>Al<sub>0.05</sub>O<sub>2</sub> Cathode Material: New Insights via <sup>7</sup>Li and <sup>27</sup>Al Magic-Angle Spinning NMR Spectroscopy. Chemistry of Materials, 2016, 28, 7594-7604. | 6.7 | 32 |
| 30 | A J-modulated protonless NMR experiment characterizes the conformational ensemble of the intrinsically disordered protein WIP. Journal of Biomolecular NMR, 2016, 66, 243-257. | 2.8 | 4 |
| 31 | Biosilica and bioinspired silica studied by solid-state NMR. Coordination Chemistry Reviews, 2016, 327-328, 110-122. | 18.8 | 23 |
| 32 | Design of Compact Biomimetic Cellulose Binding Peptides as Carriers for Cellulose Catalytic Degradation. Journal of Physical Chemistry B, 2016, 120, 309-319. | 2.6 | 10 |
| 33 | Studying the Conformation of a Silaffin-Derived Pentalysine Peptide Embedded in Bioinspired Silica using Solution and Dynamic Nuclear Polarization Magic-Angle Spinning NMR. Journal of the American Chemical Society, 2016, 138, 5561-5567. | 13.7 | 46 |
| 34 | Interfacial Mineralâ€“Peptide Properties of a Mineral Binding Peptide from Osteonectin and Bone-like Apatite. Chemistry of Materials, 2015, 27, 5562-5569. | 6.7 | 21 |
| 35 | Changes to the Disordered Phase and Apatite Crystallite Morphology during Mineralization by an Acidic Mineral Binding Peptide from Osteonectin. Biomacromolecules, 2015, 16, 2656-2663. | 5.4 | 23 |
| 36 | NMR studies of DNA microcapsules prepared using sonochemical methods. Physical Chemistry Chemical Physics, 2015, 17, 2235-2240. | 2.8 | 2 |

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|---|---|---|---|
| 37 | Covalent binding of a nickel macrocyclic complex to a silica support: towards an electron exchange column. Dalton Transactions, 2014, 43, 103-110. | 3.3 | 6 |
| 38 | Dynamic Behavior of Supramolecular Comb Polymers Consisting of Poly(2â€Vinyl Pyridine) and Palladiumâ€Pincer Surfactants in the Solid State. Chemistry - A European Journal, 2014, 20, 6951-6959. | 3.3 | 4 |
| 39 | Trapping RNase A on MCM41 pores: effects on structure stability, product inhibition and overall enzymatic activity. Physical Chemistry Chemical Physics, 2014, 16, 9031-9038. | 2.8 | 12 |
| 40 | Past and Future Solidâ€State NMR Spectroscopy Studies at the Convergence Point between Biology and Materials Research. Israel Journal of Chemistry, 2014, 54, 113-124. | 2.3 | 17 |
| 41 | Cation Diffusion Facilitators Transport Initiation and Regulation Is Mediated by Cation Induced Conformational Changes of the Cytoplasmic Domain. PLoS ONE, 2014, 9, e92141. | 2.5 | 41 |
| 42 | Preparation of Ge@Organosilicon Coreâ€“Shell Structures and Characterization by Solid State NMR and Other Techniques. Journal of Physical Chemistry C, 2013, 117, 11086-11094. | 3.1 | 3 |
| 43 | Studies of Li and Mn-Rich Li<sub>x</sub>[MnNiCo]O<sub>2</sub>Electrodes: Electrochemical Performance, Structure, and the Effect of the Aluminum Fluoride Coating. Journal of the Electrochemical Society, 2013, 160, A2220-A2233. | 2.9 | 87 |
| 44 | Solid-State NMR Studies of Biomineralization Peptides and Proteins. ACS Symposium Series, 2012, , 77-96. | 0.5 | 4 |
| 45 | Conformation and Dynamics of Organic Tethers Bound to MCM41-Type Surfaces from Solid State NMR Measurements. Journal of Physical Chemistry C, 2012, 116, 7442-7449. | 3.1 | 8 |
| 46 | Mesomorphic behavior induced by stacking interactions between poly(2-vinyl pyridine) and palladium pincer surfactants in the solid state. Soft Matter, 2012, 8, 7393. | 2.7 | 6 |
| 47 | On the Surface Chemistry of LiMO[sub 2] Cathode Materials (M=[MnNi] and [MnNiCo]): Electrochemical, Spectroscopic, and Calorimetric Studies. Journal of the Electrochemical Society, 2010, 157, A1099. | 2.9 | 86 |
| 48 | Integrated Materials xLi[sub 2]MnO[sub 3]â‹…(1â^'x)LiMn[sub 1/3]Ni[sub 1/3]Co[sub 1/3]O[sub 2] (x=0.3,â€,0.5,â€,0.7) Synthesized. Journal of the Electrochemical Society, 2010, 157, A1121. | 2.9 | 185 |
| 49 | A <sup>13</sup>C{<sup>31</sup>P} REDOR NMR Investigation of the Role of Glutamic Acid Residues in Statherin- Hydroxyapatite Recognition. Langmuir, 2009, 25, 12136-12143. | 3.5 | 41 |
| 50 | The structure, dynamics, and energetics of protein adsorptionâ€”lessons learned from adsorption of statherin to hydroxyapatite. Magnetic Resonance in Chemistry, 2007, 45, S32-S47. | 1.9 | 44 |
| 51 | Solid state NMR studies of molecular recognition at proteinâ€“mineral interfaces. Progress in Nuclear Magnetic Resonance Spectroscopy, 2007, 50, 71-85. | 7.5 | 50 |
| 52 | Thermodynamics of Statherin Adsorption onto Hydroxyapatite. Biochemistry, 2006, 45, 5576-5586. | 2.5 | 74 |
| 53 | Homonuclear and Heteronuclear NMR Studies of a Statherin Fragment Bound to Hydroxyapatite Crystals. Journal of Physical Chemistry B, 2006, 110, 9324-9332. | 2.6 | 50 |
| 54 | A REDOR study of diammonium hydrogen phosphate: A model for distance measurements from adsorbed molecules to surfaces. Solid State Nuclear Magnetic Resonance, 2006, 29, 242-250. | 2.3 | 13 |

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| 55 | Folding of the C-terminal bacterial binding domain in statherin upon adsorption onto hydroxyapatite crystals. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16083-16088. | 7.1 | 88 |