Christopher M Lee

List of Publications by Year
in descending order

28	1,483	346980 22	591227 27
papers	citations	h-index	g-index

28	28	28	1978
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing cellulose structures with vibrational spectroscopy. Cellulose, 2019, 26, 35-79.	2.4	132
2	Comparison and validation of Fourier transform infrared spectroscopic methods for monitoring secondary cell wall cellulose from cotton fibers. Cellulose, 2018, 25, 49-64.	2.4	27
3	Distinguishing Surface versus Bulk Hydroxyl Groups of Cellulose Nanocrystals Using Vibrational Sum Frequency Generation Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 70-75.	2.1	32
4	Comparative physical and chemical analyses of cotton fibers from two near isogenic upland lines differing in fiber wall thickness. Cellulose, 2017, 24, 2385-2401.	2.4	31
5	Dependence of Sum Frequency Generation (SFG) Spectral Features on the Mesoscale Arrangement of SFG-Active Crystalline Domains Interspersed in SFG-Inactive Matrix: A Case Study with Cellulose in Uniaxially Aligned Control Samples and Alkali-Treated Secondary Cell Walls of Plants. Journal of Physical Chemistry C, 2017, 121, 10249-10257.	1.5	22
6	Vibrational sum frequency generation digital holography. Applied Physics Letters, 2017, 110, 251601.	1.5	4
7	Quantum Mechanical Calculations of Vibrational Sum-Frequency-Generation (SFG) Spectra of Cellulose: Dependence of the CH and OH Peak Intensity on the Polarity of Cellulose Chains within the SFG Coherence Domain. Journal of Physical Chemistry Letters, 2017, 8, 55-60.	2.1	28
8	Experimental and Theoretical Study of Azimuth Angle and Polarization Dependences of Sum-Frequency-Generation Vibrational Spectral Features of Uniaxially Aligned Cellulose Crystals. Journal of Physical Chemistry C, 2017, 121, 18876-18886.	1.5	21
9	Effects of mechanical stretching on average orientation of cellulose and pectin in onion epidermis cell wall: A polarized FT-IR study. Cellulose, 2017, 24, 3145-3154.	2.4	25
10	Absence of Sum Frequency Generation in Support of Orthorhombic Symmetry of Î±-Chitin. Macromolecules, 2016, 49, 7025-7031.	2.2	49
11	Multimodal Broadband Vibrational Sum Frequency Generation (MM-BB-V-SFG) Spectrometer and Microscope. Journal of Physical Chemistry B, 2016, 120, 102-116.	1.2	47
12	Progressive structural changes of Avicel, bleached softwood and bacterial cellulose during enzymatic hydrolysis. Scientific Reports, 2015, 5, 15102.	1.6	64
13	Hydrogen-Bonding Network and OH Stretch Vibration of Cellulose: Comparison of Computational Modeling with Polarized IR and SFG Spectra. Journal of Physical Chemistry B, 2015, 119, 15138-15149.	1.2	152
14	Does cellulose II exist in native alga cell walls? Cellulose structure of Derbesia cell walls studied with SFG, IR and XRD. Cellulose, 2015, 22, 3531-3540.	2.4	11
15	Comprehensive analysis of cellulose content, crystallinity, and lateral packing in Gossypium hirsutum and Gossypium barbadense cotton fibers using sum frequency generation, infrared and Raman spectroscopy, and X-ray diffraction. Cellulose, 2015, 22, 971-989.	2.4	51
16	Effects of Delignification on Crystalline Cellulose in Lignocellulose Biomass Characterized by Vibrational Sum Frequency Generation Spectroscopy and X-ray Diffraction. Bioenergy Research, 2015, 8, 1750-1758.	2.2	33
17	Cellulose produced by Gluconacetobacter xylinus strains ATCC 53524 and ATCC 23768: Pellicle formation, post-synthesis aggregation and fiber density. Carbohydrate Polymers, 2015, 133, 270-276.	5.1	58
18	Cellulose microfibril orientation in onion (Allium cepa L.) epidermis studied by atomic force microscopy (AFM) and vibrational sum frequency generation (SFG) spectroscopy. Cellulose, 2014, 21, 1075-1086.	2.4	68

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19	The<i>jiaoyao1</i>Mutant Is an Allele of<i>korrigan1</i>That Abolishes Endoglucanase Activity and Affects the Organization of Both Cellulose Microfibrils and Microtubules in<i>Arabidopsis</i>Â Â. Plant Cell, 2014, 26, 2601-2616.	3.1	63
20	Effects of Plant Cell Wall Matrix Polysaccharides on Bacterial Cellulose Structure Studied with Vibrational Sum Frequency Generation Spectroscopy and X-ray Diffraction. Biomacromolecules, 2014, 15, 2718-2724.	2.6	39
21	Probing crystal structure and mesoscale assembly of cellulose microfibrils in plant cell walls, tunicate tests, and bacterial films using vibrational Sum Frequency Generation (SFG) spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 10844.	1.3	82
22	Vibrational sum-frequency-generation (SFG) spectroscopy study of the structural assembly of cellulose microfibrils in reaction woods. Cellulose, 2014, 21, 2219-2231.	2.4	30
23	Effect of mechanical disruption on the effectiveness of three reactors used for dilute acid pretreatment of corn stover Part 1: chemical and physical substrate analysis. Biotechnology for Biofuels, 2014, 7, 57.	6.2	39
24	Cellulose polymorphism study with sum-frequency-generation (SFG) vibration spectroscopy: identification of exocyclic CH2OH conformation and chain orientation. Cellulose, 2013, 20, 991-1000.	2.4	76
25	Characterization of crystalline cellulose in biomass: Basic principles, applications, and limitations of XRD, NMR, IR, Raman, and SFG. Korean Journal of Chemical Engineering, 2013, 30, 2127-2141.	1.2	154
26	Sum-Frequency-Generation Vibration Spectroscopy and Density Functional Theory Calculations with Dispersion Corrections (DFT-D2) for Cellulose IÎ± and IÎ². Journal of Physical Chemistry B, 2013, 117, 6681-6692.	1.2	90
27	Vibrational sum frequency generation (SFG) spectroscopic study of crystalline cellulose in biomass. , 2013, , .		6
28	Monitoring Meso-Scale Ordering of Cellulose in Intact Plant Cell Walls Using Sum Frequency Generation Spectroscopy. Plant Physiology, 2013, 163, 907-913.	2.3	49