Kirk D Rector

List of Publications by Year
in descending order

32 papers	1,268 citations	331670 21 h-index	454955 30 g-index
32 all docs	32 docs citations	32 times ranked	1486 citing authors

#	Article	IF	Citations
1	Spectroscopic investigation of U(VI) sorption at the calcite-water interface. Geochimica Et Cosmochimica Acta, 2004, 68, 2437-2448.	3.9	102
2	Vibrational lifetimes and vibrational line positions in polyatomic supercritical fluids near the critical point. Journal of Chemical Physics, 1997, 107, 3747-3757.	3.0	86
3	Vibrational anharmonicity and multilevel vibrational dephasing from vibrational echo beats. Journal of Chemical Physics, 1997, 106, 10027-10036.	3.0	85
4	Effects of Solvent Viscosity on Protein Dynamics:â€‰ Infrared Vibrational Echo Experiments and Theory. Journal of Physical Chemistry B, 2001, 105, 1081-1092.	2.6	79
5	Exploring new strategies for cellulosic biofuels production. Energy and Environmental Science, 2011, 4, 3820.	30.8	79
6	Vibrational Echo Studies of Protein Dynamics. Physical Review Letters, 1996, 77, 1648-1651.	7.8	65
7	Mutant and Wild-Type Myoglobin-CO Protein Dynamics:Â Vibrational Echo Experiments. Journal of Physical Chemistry B, 1997, 101, 1468-1475.	2.6	63
8	Determination of the Insulation Gap of Uranium Oxides by Spectroscopic Ellipsometry and Density Functional Theory. Journal of Physical Chemistry C, 2013, 117, 16540-16551.	3.1	57
9	Vibrational dephasing mechanisms in liquids and glasses: Vibrational echo experiments. Journal of Chemical Physics, 1998, 108, 1794-1803.	3.0	56
10	Reversible swelling of the cell wall of poplar biomass by ionic liquid at room temperature. Bioresource Technology, 2011, 102, 4518-4523.	9.6	53
11	Vibrational echoes: A new approach to condensed-matter vibrational spectroscopy. International Reviews in Physical Chemistry, 1998, 17, 261-306.	2.3	52
12	Ionic Liquid Pretreatment of Poplar Wood at Room Temperature: Swelling and Incorporation of Nanoparticles. ACS Applied Materials & Interfaces, 2010, 2, 2198-2205.	8.0	49
13	A Dynamical Transition in the Protein Myoglobin Observed by Infrared Vibrational Echo Experiments. Journal of Physical Chemistry A, 1999, 103, 2381-2387.	2.5	45
14	Evidence for room temperature delignification of wood using hydrogen peroxide and manganese acetate as a catalyst. Bioresource Technology, 2012, 119, 174-180.	9.6	43
15	Site-specific incorporation of uranyl carbonate species at the calcite surface. Geochimica Et Cosmochimica Acta, 2004, 68, 4799-4808.	3.9	42
16	Sulfur-resistant and regenerable Ni/Co spinel-based catalysts for methane dry reforming. Catalysis Science and Technology, 2015, 5, 4565-4574.	4.1	41
17	Vibrational relaxation of a polyatomic solute in a polyatomic supercritical fluid near the critical point. Journal of Chemical Physics, 1996, 105, 8973-8976.	3.0	39
18	Vibrational echo spectroscopy: Spectral selectivity from vibrational coherence. Journal of Chemical Physics, 1998, 109, 5455-5465.	3.0	36

#	Article	IF	Citations
19	Tyrosine-derived stimuli responsive, fluorescent amino acids. Chemical Science, 2015, 6, 1150-1158.	7.4	35
20	Two-pulse echo experiments in the spectral diffusion regime. Journal of Chemical Physics, 2000, 113, 3233-3242.	3.0	32
21	SERS nanosensors that report pH of endocytic compartments during FcÎµRI transit. Analytical and Bioanalytical Chemistry, 2010, 398, 2019-2029.	3.7	27
22	Microfluidic Flow-Flash:Â Method for Investigating Protein Dynamics. Analytical Chemistry, 2007, 79, 122-128.	6.5	20
23	A geochemical approach to constraining the formation of glassy fallout debris from nuclear tests. Contributions To Mineralogy and Petrology, 2017, 172, 1.	3.1	17
24	Characterization of Chemical Speciation in Ultrathin Uranium Oxide Layered Films. Analytical Chemistry, 2012, 84, 10380-10387.	6.5	16
25	Preparation of Epitaxial Uranium Dicarbide Thin Films by Polymer-Assisted Deposition. Chemistry of Materials, 2013, 25, 4373-4377.	6.7	15
26	Morphologic and chemical characterization of products from hydrolysis of UF6. Journal of Fluorine Chemistry, 2015, 178, 107-114.	1.7	12
27	c-KIT signaling is targeted by pathogenic Yersiniato suppress the host immune response. BMC Microbiology, 2013, 13, 249.	3.3	9
28	Formation of solid thorium monoxide at near-ambient conditions as observed by neutron reflectometry and interpreted by screened hybrid functional calculations. Journal of Nuclear Materials, 2017, 487, 288-296.	2.7	6
29	Live Cells as Dynamic Laboratories: Time Lapse Raman Spectral Microscopy of Nanoparticles with Both IgE Targeting and pH-Sensing Functions. International Journal of Analytical Chemistry, 2012, 2012, 1-16.	1.0	3
30	Whispering gallery mode resonators in continuous flow: spectral assignments and sensing with monodisperse microspheres. Analytical Methods, 2022, 14, 1690-1697.	2.7	3
31	Application of Ionic Liquids in the Conversion of Native Lignocellulosic Biomass to Biofuels. , 2012, , 145-186.		1
32	<title>Vibrational echo studies of proteins, liquids, and glasses</title>. , 1998, 3273, 34.		0