Aaron M Massari

List of Publications by Year
in descending order

52 papers	1,277 citations	361413 20 h-index	377865 34 g-index
55 all docs	55 docs citations	55 times ranked	1224 citing authors

#	Article	IF	Citations
1	Ruthenium hydrides encapsulated in solâ€“gel glasses exhibit new ultrafast vibrational dynamics. Journal of Chemical Physics, 2022, 156, 124502.	3.0	1
2	Sum frequency generation as a proxy for ellipsometry: Not just a phase. Journal of Chemical Physics, 2022, 156, 110901.	3.0	3
3	The role of ultrafast structural dynamics with physical and chemical changes in polydimethylsiloxane thin films by two-dimensional IR spectroscopy. Journal of Chemical Physics, 2021, 154, 174902.	3.0	1
4	Ultrafast Dynamics Experienced by Carbon Dioxide Diffusing through Polymer Matrices. Journal of Physical Chemistry B, 2021, 125, 8997-9004.	2.6	2
5	Thin Films and Bulk Phases Conucleate at the Interfaces of Pentacene Thin Films. Journal of Physical Chemistry C, 2021, 125, 16803-16809.	3.1	6
6	Spectroscopic Study of Solâ€“Gel Entrapped Triruthenium Dodecacarbonyl Catalyst Reveals Hydride Formation. Journal of Physical Chemistry Letters, 2020, 11, 7394-7399.	4.6	4
7	Measuring Dopant-Modulated Vibrational Energy Transfer over the Surface of Silicon Nanoparticles by 2D-IR Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 8693-8698.	3.1	3
8	Influence of Solvent Swelling on Ultrafast Structural Dynamics in Polydimethylsiloxane Thin Films by Two-Dimensional IR Spectroscopy. Journal of Physical Chemistry A, 2018, 122, 1592-1599.	2.5	3
9	Vibrational heavy atom effect controls relaxation and spectral diffusion in triphenyl hydride complexes. Chemical Physics, 2018, 512, 98-103.	1.9	4
10	Simplified sum frequency generation using a narrow free-spectral-range etalon. Optics Letters, 2018, 43, 4747.	3.3	5
11	Evolution of Ultrafast Vibrational Dynamics During Solâ€“Gel Aging. Journal of Physical Chemistry C, 2017, 121, 2933-2939.	3.1	7
12	Enhanced vibrational solvatochromism and spectral diffusion by electron rich substituents on small molecule silanes. Journal of Chemical Physics, 2017, 147, 124302.	3.0	10
13	Frequency comb SFG: a new approach to multiplex detection. Optics Express, 2016, 24, 19863.	3.4	9
14	Observation of Proton Transfer between Bridging Ligands on a Catalyst by 2D-IR Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 24877-24884.	3.1	3
15	Vibrational Sum Frequency Generation Spectroscopy of Fullerene at Dielectric Interfaces. Journal of Physical Chemistry C, 2016, 120, 1666-1672.	3.1	16
16	Optical Interference Enhances Nonlinear Spectroscopic Sensitivity: When Light Gives You Lemons, Model Lemonade. Journal of Physical Chemistry Letters, 2016, 7, 62-68.	4.6	15
17	Correlating solvent dynamics and chemical reaction rates using binary solvent mixtures and two-dimensional infrared spectroscopy. Journal of Chemical Physics, 2015, 142, 212441.	3.0	15
18	2D-IR Spectroscopy of Porous Silica Nanoparticles: Measuring the Distance Sensitivity of Spectral Diffusion. Journal of Physical Chemistry C, 2015, 119, 25135-25144.	3.1	20

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19	Simple fully reflective method of scatter reduction in 2D-IR spectroscopy. Optics Letters, 2015, 40, 1850.	3.3	11
20	Experimental evidence for an optical interference model for vibrational sum frequency generation on multilayer organic thin film systems. II. Consideration for higher order terms. Journal of Chemical Physics, 2015, 142, 024704.	3.0	22
21	Experimental evidence for an optical interference model for vibrational sum frequency generation on multilayer organic thin film systems. I. Electric dipole approximation. Journal of Chemical Physics, 2015, 142, 024703.	3.0	18
22	Quantifying the Soda Geyser. Journal of Chemical Education, 2014, 91, 428-431.	2.3	12
23	Characterizing Solvent Dynamics in Nanoscopic Silica Solâ€“Gel Glass Pores by 2D-IR Spectroscopy of an Intrinsic Vibrational Probe. Journal of Physical Chemistry C, 2014, 118, 25567-25578.	3.1	16
24	Real-time structural evolution at the interface of an organic transistor during thermal annealing. Journal of Materials Chemistry C, 2014, 2, 3390-3400.	5.5	13
25	Origins of Spectral Broadening in Iodated Vaskaâ€™s Complex in Binary Solvent Mixtures. Journal of Physical Chemistry B, 2013, 117, 15741-15749.	2.6	20
26	Solvent-Mediated Vibrational Energy Relaxation from Vaskaâ€™s Complex Adducts in Binary Solvent Mixtures. Journal of Physical Chemistry A, 2013, 117, 6150-6157.	2.5	21
27	Modeling multilayer thin film interference effects in interface-specific coherent nonlinear optical spectroscopies. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 1503.	2.1	34
28	Simulated vibrational sum frequency generation from a multilayer thin film system with two active interfaces. Journal of Chemical Physics, 2013, 138, 154708.	3.0	35
29	Polarization-multiplexed vibrational sum frequency generation for comprehensive simultaneous characterization of interfaces. Optics Letters, 2012, 37, 1754.	3.3	8
30	Vibrational Solvatochromism in Vaskaâ€™s Complex Adducts. Journal of Physical Chemistry A, 2012, 116, 9279-9286.	2.5	19
31	Interfacial Ring Orientation in Polythiophene Field-Effect Transistors on Functionalized Dielectrics. Journal of Physical Chemistry C, 2011, 115, 16027-16036.	3.1	49
32	Surface Chemistry and Annealing-Driven Interfacial Changes in Organic Semiconducting Thin Films on Silica Surfaces. Langmuir, 2011, 27, 13940-13949.	3.5	24
33	Static and Dynamic Structural Memory in Polyaniline Thin Films. Journal of Physical Chemistry B, 2011, 115, 8686-8695.	2.6	6
34	Ground-State Structural Dynamics in Doped and Undoped Polyaniline Films Probed by Two-Dimensional Infrared Vibrational Echo Spectroscopy. Journal of Physical Chemistry B, 2011, 115, 4583-4591.	2.6	13
35	Solvation Dynamics of Vaskaâ€™s Complex by 2D-IR Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 24813-24822.	3.1	31
36	Nonlinear Spectroscopic Markers of Structural Change during Charge Accumulation in Organic Field-Effect Transistors. Journal of Physical Chemistry C, 2011, 115, 20258-20266.	3.1	22

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37	2D-IR Studies of Annealing-Induced Changes to Structural Dynamics in Organic Semiconductor Thin Films. Journal of Physical Chemistry C, 2010, 114, 12308-12315.	3.1	9
38	Monitoring the Charge Accumulation Process in Polymeric Field-Effect Transistors via in Situ Sum Frequency Generation. Journal of Physical Chemistry C, 2010, 114, 17629-17637.	3.1	43
39	Infrared Spectroscopic Signatures of Phase Segregation in P3HTâ^'Porphyrin Blends. Journal of Physical Chemistry B, 2009, 113, 14549-14554.	2.6	7
40	Substrate binding and protein conformational dynamics measured by 2D-IR vibrational echo spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2637-2642.	7.1	85
41	Neuroglobin dynamics observed with ultrafast 2D-IR vibrational echo spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16116-16121.	7.1	71
42	Viscosity-Dependent Protein Dynamics. Biophysical Journal, 2007, 92, 3652-3662.	0.5	47
43	Cytochrome c552Mutants:Â Structure and Dynamics at the Active Site Probed by Multidimensional NMR and Vibration Echo Spectroscopyâ€. Journal of Physical Chemistry B, 2006, 110, 18803-18810.	2.6	18
44	Organic Photovoltaics Interdigitated on the Molecular Scale. Journal of the Electrochemical Society, 2006, 153, A527.	2.9	37
45	Dynamics of Proteins Encapsulated in Silica Solâ^'Gel Glasses Studied with IR Vibrational Echo Spectroscopy. Journal of the American Chemical Society, 2006, 128, 3990-3997.	13.7	65
46	The Influence of Aqueous versus Glassy Solvents on Protein Dynamics:Â Vibrational Echo Experiments and Molecular Dynamics Simulations. Journal of the American Chemical Society, 2005, 127, 14279-14289.	13.7	96
47	Ultrafast Dynamics of Myoglobin without the Distal Histidine:â€‰ Stimulated Vibrational Echo Experiments and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2005, 109, 16959-16966.	2.6	56
48	Walljet Electrochemistry:Â Quantifying Molecular Transport through Metallopolymeric and Zirconium Phosphonate Assembled Porphyrin Square Thin Films. Langmuir, 2004, 20, 4422-4429.	3.5	35
49	A Porous Multilayer Dye-Based Photoelectrochemical Cell That Unexpectedly Runs in Reverse. Journal of Physical Chemistry B, 2004, 108, 4111-4115.	2.6	66
50	Ultrathin micropatterned porphyrin films assembled via zirconium phosphonate chemistry. Polyhedron, 2003, 22, 3065-3072.	2.2	32
51	Synthesis, Characterization, and Preliminary Intramolecular Energy Transfer Studies of Rigid, Emissive, Rhenium-Linked Porphyrin Dimers. Inorganic Chemistry, 2002, 41, 619-621.	4.0	76
52	Imaging Size-Selective Permeation through Micropatterned Thin Films Using Scanning Electrochemical Microscopy. Analytical Chemistry, 2000, 72, 3122-3128.	6.5	32