Jacob W Martin

List of Publications by Year
in descending order

34	898	430754 18	477173 29
papers	citations	h-index	g-index

34	34	34	835
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Soot inception: Carbonaceous nanoparticle formation in flames. Progress in Energy and Combustion Science, 2022, 88, 100956.	15.8	117
2	On the reactive coagulation of incipient soot nanoparticles. Journal of Aerosol Science, 2022, 159, 105866.	1.8	10
3	Aromatic penta-linked hydrocarbons in soot nanoparticle formation. Proceedings of the Combustion Institute, 2021, 38, 1525-1532.	2.4	12
4	Mechanical Properties of Soot Particles: The Impact of Crosslinked Polycyclic Aromatic Hydrocarbons. Combustion Science and Technology, 2021, 193, 643-663.	1.2	14
5	Reactive localized Ï€-radicals on rim-based pentagonal rings: Properties and concentration in flames. Proceedings of the Combustion Institute, 2021, 38, 565-573.	2.4	13
6	Ï€-Diradical Aromatic Soot Precursors in Flames. Journal of the American Chemical Society, 2021, 143, 12212-12219.	6.6	41
7	The role of oxygenated species in the growth of graphene, fullerenes and carbonaceous particles. Carbon, 2021, 182, 203-213.	5.4	14
8	Self-assembly of curved aromatic molecules in nanoparticles. Carbon, 2021, 182, 70-88.	5.4	4
9	Reactivity of Polycyclic Aromatic Hydrocarbon Soot Precursors: Kinetics and Equilibria. Journal of Physical Chemistry A, 2020, 124, 10040-10052.	1.1	25
10	Exploring the internal structure of soot particles using nanoindentation: A reactive molecular dynamics study. Combustion and Flame, 2020, 219, 45-56.	2.8	22
11	The impact of cyclic fuels on the formation and structure of soot. Combustion and Flame, 2020, 219, 1-12.	2.8	25
12	Polar curved polycyclic aromatic hydrocarbons in soot formation. Proceedings of the Combustion Institute, 2019, 37, 1117-1123.	2.4	37
13	Sphere Encapsulated Monte Carlo: Obtaining Minimum Energy Configurations of Large Aromatic Systems. Journal of Physical Chemistry A, 2019, 123, 7303-7313.	1.1	4
14	Optical band gap of cross-linked, curved, and radical polyaromatic hydrocarbons. Physical Chemistry Chemical Physics, 2019, 21, 16240-16251.	1.3	45
15	Topology of Disordered 3D Graphene Networks. Physical Review Letters, 2019, 123, 116105.	2.9	37
16	Reactivity of Polycyclic Aromatic Hydrocarbon Soot Precursors: Implications of Localized Ï€-Radicals on Rim-Based Pentagonal Rings. Journal of Physical Chemistry C, 2019, 123, 26673-26682.	1.5	47
17	Ion-Induced Soot Nucleation Using a New Potential for Curved Aromatics. Combustion Science and Technology, 2019, 191, 747-765.	1.2	21
18	An assessment of the viability of alternatives to biodiesel transport fuels. Applied Energy, 2019, 251, 113363.	5.1	6

#	Article	IF	Citations
19	An Ontology and Semantic Web Service for Quantum Chemistry Calculations. Journal of Chemical Information and Modeling, 2019, 59, 3154-3165.	2.5	33
20	Dynamic polarity of curved aromatic soot precursors. Combustion and Flame, 2019, 206, 150-157.	2.8	10
21	Atomic structure and electronic structure of disordered graphitic carbon nitride. Carbon, 2019, 147, 483-489.	5.4	12
22	Nanostructure of Gasification Charcoal (Biochar). Environmental Science & Technology, 2019, 53, 3538-3546.	4.6	20
23	Partitioning of polycyclic aromatic hydrocarbons in heterogeneous clusters. Carbon, 2019, 143, 247-256.	5.4	17
24	Internal structure of soot particles in a diffusion flame. Carbon, 2019, 141, 635-642.	5.4	94
25	Flexoelectricity and the Formation of Carbon Nanoparticles in Flames. Journal of Physical Chemistry C, 2018, 122, 22210-22215.	1.5	23
26	A big data framework to validate thermodynamic data for chemical species. Combustion and Flame, 2017, 176, 584-591.	2.8	8
27	Raman on a disc: high-quality Raman spectroscopy in an open channel on a centrifugal microfluidic disc. Analyst, The, 2017, 142, 1682-1688.	1.7	11
28	Giant fullerene formation through thermal treatment of fullerene soot. Carbon, 2017, 125, 132-138.	5.4	37
29	The Polarization of Polycyclic Aromatic Hydrocarbons Curved by Pentagon Incorporation: The Role of the Flexoelectric Dipole. Journal of Physical Chemistry C, 2017, 121, 27154-27163.	1.5	48
30	The enhancement of chain rigidity and gas transport performance of polymers of intrinsic microporosity via intramolecular locking of the spiro-carbon. Chemical Communications, 2016, 52, 6553-6556.	2.2	53
31	Can nascent soot particles burn from the inside?. Carbon, 2016, 109, 608-615.	5.4	16
32	Gold-sputtered Blu-ray discs: simple and inexpensive SERS substrates for sensitive detection of melamine. Analytical and Bioanalytical Chemistry, 2016, 408, 4403-4411.	1.9	18
33	Gold sputtered Blu-Ray disks as novel and cost effective sensors for surface enhanced Raman spectroscopy. , 2015, , .		4
34	PyTrA: ultra-fast transient absorption data analysis software. International Journal of Nanotechnology, 2014, 11, 601.	0.1	0