Paul R Ohodnicki Jr

List of Publications by Citations

50 papers	1,354 citations	21 h-index	36 g-index
62 ext. papers	1,633 ext. citations	5.4 avg, IF	4.75 L-index

#	Paper	IF	Citations
50	Size-dependent photocatalytic reduction of CO2 with PbS quantum dot sensitized TiO2 heterostructured photocatalysts. *Journal of Materials Chemistry*, **2011**, 21, 13452		180
49	SAW Sensors for Chemical Vapors and Gases. *Sensors*, **2017**, 17,	3.8	122
48	Visible light plasmonic heating of Au-ZnO for the catalytic reduction of CO2. *Nanoscale*, **2013**, 5, 6968-74	7.7	117
47	Probing active site chemistry with differently charged Au25q nanoclusters (q = −1, 0, +1). *Chemical Science*, **2014**, 5, 3151	9.4	86
46	Plasmonic nanocomposite thin film enabled fiber optic sensors for simultaneous gas and temperature sensing at extreme temperatures. *Nanoscale*, **2013**, 5, 9030-9	7.7	65
45	Distributed Optical Fiber Sensors with Ultrafast Laser Enhanced Rayleigh Backscattering Profiles for Real-Time Monitoring of Solid Oxide Fuel Cell Operations. *Scientific Reports*, **2017**, 7, 9360	4.9	54
44	In-situ and ex-situ characterization of TiO2 and Au nanoparticle incorporated TiO2 thin films for optical gas sensing at extreme temperatures. *Journal of Applied Physics*, **2012**, 111, 064320	2.5	52
43	Surface acoustic wave devices for harsh environment wireless sensing. *Sensors*, **2013**, 13, 6910-35	3.8	47
42	Perovskite Nanoparticle-Sensitized Ga2O3 Nanorod Arrays for CO Detection at High Temperature. *ACS Applied Materials & Interfaces*, **2016**, 8, 8880-7	9.5	46
41	Synthesis, characterization, and photocatalytic activity of Au@ZnO nanopyramids. *Journal of Materials Chemistry A*, **2015**, 3, 15141-15147	13	42
40	Giant induced magnetic anisotropy In strain annealed Co-based nanocomposite alloys. *Applied Physics Letters*, **2012**, 101, 102408	3.4	41
39	Corrosion Sensors for Structural Health Monitoring of Oil and Natural Gas Infrastructure: A Review. *Sensors*, **2019**, 19,	3.8	40
38	High temperature optical sensing of gas and temperature using Au-nanoparticle incorporated oxides. *Sensors and Actuators B: Chemical*, **2014**, 202, 489-499	8.5	39
37	First-principles study on the electronic, optical and thermodynamic properties of ABO3 (A = La,Sr, B = Fe,Co) perovskites. *RSC Advances*, **2017**, 7, 38798-38804	3.7	32
36	Materials for the photoluminescent sensing of rare earth elements: challenges and opportunities. *Journal of Materials Chemistry C*, **2020**, 8, 7975-8006	7.1	31
35	Engineering metal oxide nanostructures for the fiber optic sensor platform. *Optics Express*, **2014**, 22, 2665-74	3.3	30
34	Magnetic properties and crystallization kinetics of (Fe100−xNix)80Nb4Si2B14 metal amorphous nanocomposites. *Scripta Materialia*, **2018**, 142, 133-137	5.6	27

33	The Effects of Strain-Annealing on Tuning Permeability and Lowering Losses in Fe-Ni-Based Metal Amorphous Nanocomposites. *Jom*, **2017**, 69, 2164-2170	2.1	26
32	The influence of oxygen vacancy on the electronic and optical properties of ABO (A = La, Sr, B = Fe, Co) perovskites. *Physical Chemistry Chemical Physics*, **2019**, 21, 20454-20462	3.6	25
31	Sapphire Fiber Optical Hydrogen Sensors for High-Temperature Environments. *IEEE Photonics Technology Letters*, **2016**, 28, 47-50	2.2	24
30	Novel silica surface charge density mediated control of the optical properties of embedded optically active materials and its application for fiber optic pH sensing at elevated temperatures. *Nanoscale*, **2015**, 7, 2527-35	7.7	22
29	Multi-component optical sensing of high temperature gas streams using functional oxide integrated silica based optical fiber sensors. *Sensors and Actuators B: Chemical*, **2018**, 255, 357-365	8.5	21
28	Creating glasswing butterfly-inspired durable antifogging superomniphobic supertransmissive, superclear nanostructured glass through Bayesian learning and optimization. *Materials Horizons*, **2019**, 6, 1632-1642	14.4	17
27	Electronic structural, optical and phonon lattice dynamical properties of pure- and La-doped SrTiO 3 : An ab initio thermodynamics study. *Journal of Solid State Chemistry*, **2017**, 256, 239-251	3.3	16
26	Understanding three-dimensionally interconnected porous oxide-derived copper electrocatalyst for selective carbon dioxide reduction. *Journal of Materials Chemistry A*, **2019**, 7, 27576-27584	13	16
25	Zinc-Adeninate Metal-Organic Framework: A Versatile Photoluminescent Sensor for Rare Earth Elements in Aqueous Systems. *ACS Sensors*, **2019**, 4, 1986-1991	9.2	15
24	A highly scalable spray coating technique for electrode infiltration: Barium carbonate infiltrated La0.6Sr0.4Co0.2Fe0.8O3-□perovskite structured electrocatalyst with demonstrated long term durability. *International Journal of Hydrogen Energy*, **2017**, 42, 24978-24988	6.7	15
23	Self-cleaning, high transmission, near unity haze OTS/silica nanostructured glass. *Journal of Materials Chemistry C*, **2018**, 6, 9191-9199	7.1	14
22	High-temperature stability of silver nanoparticles geometrically confined in the nanoscale pore channels of anodized aluminum oxide for SERS in harsh environments. *RSC Advances*, **2016**, 6, 86930-86937	3.7	13
21	Flexible nanograss with highest combination of transparency and haze for optoelectronic plastic substrates. *Nanotechnology*, **2018**, 29, 42LT01	3.4	9
20	Thermal profile shaping and loss impacts of strain annealing on magnetic ribbon cores. *Journal of Materials Research*, **2018**, 33, 2189-2206	2.5	9
19	Scalable Fabrication of Metal Oxide Functional Materials and Their Applications in High-Temperature Optical Sensing. *Jom*, **2015**, 67, 53-58	2.1	9
18	Artificial Intelligent Pattern Recognition for Optical Fiber Distributed Acoustic Sensing Systems Based on Phase-OTDR **2018**,		6
17	First-Principles Investigations of the Temperature Dependence of Electronic Structure and Optical Properties of Rutile TiO2. *Journal of Physical Chemistry C*, **2018**, 122, 22642-22649	3.8	6
16	Fiber Optical Sensor for Methane Detection Based on Metal-Organic Framework/Silicone Polymer Coating **2018**,		5

15	Theoretical study of the optical and thermodynamic properties of LaSrCoFeO (x/y = 0.25, 0.5, 0.75) perovskites. *Physical Chemistry Chemical Physics*, **2019**, 21, 26117-26122	3.6	5
14	High spatial resolution fiber optical sensors for simultaneous temperature and chemical sensing for energy industries **2017**,		3
13	Theoretical and experimental investigation of evanescent-wave absorption sensors for extreme temperature applications **2013**,		3
12	Shielding of Leakage Flux Induced Losses in High Power, Medium Frequency Transformers **2019**,		3
11	Wireless CO2 SAW Sensors with a Nanoporous ZIF-8 Sensing Layer **2018**,		3
10	Thermally induced emission from hydroxyl groups in fused silica optical fibers. *Optical Fiber Technology*, **2019**, 52, 101951	2.4	2
9	Theoretical Investigation of the Electronic, Structural, Optical and Thermodynamic Properties of LaxSr1-xTiO3(x=0, 0.125, 0.25). *ECS Transactions*, **2017**, 78, 2865-2876	1	2
8	Optical properties and long-term stability of unclad single crystal sapphire fiber in harsh environments **2019**,		2
7	Characterization of Interaction between Fe-Infiltrates and LSM Backbone in Solid Oxide Fuel Cells. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1701044	1.6	2
6	Improvement of light confinement in nanostructured sapphire optical fibers **2017**,		1
5	Laser heated pedestal growth system commissioning and fiber processing **2016**,		1
4	3D sub-wavelength refractive index adjusted metal oxides for applications in optical sensing **2014**,		1
3	Optical Fiber Sensor-Fused Additive Manufacturing and Its Applications in Residual Stress Measurements in Titanium Parts **2016**,		1
2	Optical Fiber Sensor-Fused Additive Manufacturing and Its Applications in Residual Stress Measurements **2017**,		1
1	Soft Magnetic Materials Characterization for Power Electronics Applications and Advanced Data Sheets **2019**,		1