Paul R Ohodnicki Jr

List of Publications by Year in Descending Order

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	Materials for the photoluminescent sensing of rare earth elements: challenges and opportunities. *Journal of Materials Chemistry C*, **2020**, 8, 7975-8006	7.1	31
49	Thermally induced emission from hydroxyl groups in fused silica optical fibers. *Optical Fiber Technology*, **2019**, 52, 101951	2.4	2
48	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
47	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
46	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
45	Corrosion Sensors for Structural Health Monitoring of Oil and Natural Gas Infrastructure: A Review. *Sensors*, **2019**, 19,	3.8	40
44	Optical properties and long-term stability of unclad single crystal sapphire fiber in harsh environments **2019**,		2
43	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
42	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
41	Soft Magnetic Materials Characterization for Power Electronics Applications and Advanced Data Sheets **2019**,		1
40	Shielding of Leakage Flux Induced Losses in High Power, Medium Frequency Transformers **2019**,		3
39	Magnetic properties and crystallization kinetics of (Fe100 □xNix)80Nb4Si2B14 metal amorphous nanocomposites. *Scripta Materialia*, **2018**, 142, 133-137	5.6	27
38	Flexible nanograss with highest combination of transparency and haze for optoelectronic plastic substrates. *Nanotechnology*, **2018**, 29, 42LT01	3.4	9
37	Thermal profile shaping and loss impacts of strain annealing on magnetic ribbon cores. *Journal of Materials Research*, **2018**, 33, 2189-2206	2.5	9
36	Self-cleaning, high transmission, near unity haze OTS/silica nanostructured glass. *Journal of Materials Chemistry C*, **2018**, 6, 9191-9199	7.1	14
35	Fiber Optical Sensor for Methane Detection Based on Metal-Organic Framework/Silicone Polymer Coating **2018**,		5
34	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

33	Artificial Intelligent Pattern Recognition for Optical Fiber Distributed Acoustic Sensing Systems Based on Phase-OTDR **2018**,		6
32	Wireless CO2 SAW Sensors with a Nanoporous ZIF-8 Sensing Layer **2018**,		3
31	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
30	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
29	Improvement of light confinement in nanostructured sapphire optical fibers **2017**,		1
28	High spatial resolution fiber optical sensors for simultaneous temperature and chemical sensing for energy industries **2017**,		3
27	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
26	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
25	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
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	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
22	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
21	SAW Sensors for Chemical Vapors and Gases. *Sensors*, **2017**, 17,	3.8	122
20	Optical Fiber Sensor-Fused Additive Manufacturing and Its Applications in Residual Stress Measurements **2017**,		1
19	Laser heated pedestal growth system commissioning and fiber processing **2016**,		1
18	Sapphire Fiber Optical Hydrogen Sensors for High-Temperature Environments. *IEEE Photonics Technology Letters*, **2016**, 28, 47-50	2.2	24
17	Optical Fiber Sensor-Fused Additive Manufacturing and Its Applications in Residual Stress Measurements in Titanium Parts **2016**,		1
16	Perovskite Nanoparticle-Sensitized Ga2O3 Nanorod Arrays for CO Detection at High Temperature. *ACS Applied Materials & Interfaces*, **2016**, 8, 8880-7	9.5	46

15	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
14	Synthesis, characterization, and photocatalytic activity of Au□ZnO nanopyramids. *Journal of Materials Chemistry A*, **2015**, 3, 15141-15147	13	42
13	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
12	Scalable Fabrication of Metal Oxide Functional Materials and Their Applications in High-Temperature Optical Sensing. *Jom*, **2015**, 67, 53-58	2.1	9
11	Probing active site chemistry with differently charged Au25q nanoclusters (q = □1, 0, +1). *Chemical Science*, **2014**, 5, 3151	9.4	86
10	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
9	Engineering metal oxide nanostructures for the fiber optic sensor platform. *Optics Express*, **2014**, 22, 2665-74	3.3	30
8	3D sub-wavelength refractive index adjusted metal oxides for applications in optical sensing **2014**,		1
7	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
6	Visible light plasmonic heating of Au-ZnO for the catalytic reduction of CO2. *Nanoscale*, **2013**, 5, 6968-74	7.7	117
5	Surface acoustic wave devices for harsh environment wireless sensing. *Sensors*, **2013**, 13, 6910-35	3.8	47
4	Theoretical and experimental investigation of evanescent-wave absorption sensors for extreme temperature applications **2013**,		3
3	Giant induced magnetic anisotropy In strain annealed Co-based nanocomposite alloys. *Applied Physics Letters*, **2012**, 101, 102408	3.4	41
2	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
1	Size-dependent photocatalytic reduction of CO2 with PbS quantum dot sensitized TiO2 heterostructured photocatalysts. *Journal of Materials Chemistry*, **2011**, 21, 13452		180