Matthieu Hamel

List of Publications by Year
in descending order

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87 papers	1,396 citations	394421 19 h-index	361022 35 g-index
91 all docs	91 docs citations	91 times ranked	1522 citing authors

#	Article	IF	Citations
1	Mercaptophosphonate Compounds as Broad-Spectrum Inhibitors of the Metallo-Î²-lactamases. Journal of Medicinal Chemistry, 2010, 53, 4862-4876.	6.4	128
2	Designing NHCâ€“Copper(I) Dipyridylamine Complexes for Blue Light-Emitting Electrochemical Cells. ACS Applied Materials & Interfaces, 2016, 8, 14678-14691.	8.0	113
3	Current Status on Plastic Scintillators Modifications. Chemistry - A European Journal, 2014, 20, 15660-15685.	3.3	107
4	Pulse shape discrimination between (fast or thermal) neutrons and gamma rays with plastic scintillators: State of the art. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 776, 114-128.	1.6	97
5	NHC Copper(I) Complexes Bearing Dipyridylamine Ligands: Synthesis, Structural, and Photoluminescent Studies. Inorganic Chemistry, 2014, 53, 9181-9191.	4.0	96
6	Direct observation of athermal photofluidisation in azo-polymer films. Soft Matter, 2014, 10, 4640-4647.	2.7	67
7	Disulfide Prodrugs of Albitiazolium (T3/SAR97276): Synthesis and Biological Activities. Journal of Medicinal Chemistry, 2012, 55, 4619-4628.	6.4	51
8	Gadolinium for neutron detection in current nuclear instrumentation research: A review. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 882, 53-68.	1.6	46
9	Neutron/gamma pulse shape discrimination in plastic scintillators: Preparation and characterization of various compositions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 750, 1-11.	1.6	41
10	Role of the Bridging Group in Bisâ€Pyridyl Ligands: Enhancing Both the Photoâ€•and Electroluminescent Features of Cationic (IPr)Cu^I Complexes. Chemistry - A European Journal, 2017, 23, 16328-16337.	3.3	36
11	Azobenzene based polymers as photoactive supports and micellar structures for applications in biology. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 291, 16-25.	3.9	35
12	Thermo- and radioluminescent polystyrene based plastic scintillators doped with phosphorescent iridium(<scp>iii</scp>) complexes. Journal of Materials Chemistry C, 2014, 2, 6125.	5.5	33
13	Influence of bismuth loading in polystyrene-based plastic scintillators for low energy gamma spectroscopy. Journal of Materials Chemistry C, 2014, 2, 7304.	5.5	32
14	Understanding the behaviour of different metals in loaded scintillators: discrepancy between gadolinium and bismuth. Journal of Materials Chemistry C, 2015, 3, 6006-6011.	5.5	29
15	Preparation and characterization of highly lead-loaded red plastic scintillators under low energy x-rays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 660, 57-63.	1.6	25
16	Azo-polysiloxanes as new supports for cell cultures. Materials Science and Engineering C, 2013, 33, 2440-2445.	7.3	24
17	Fluorescent polymeric aggregates for selective response to Sarin surrogates. Chemical Communications, 2014, 50, 9965-9968.	4.1	23
18	Fluorescent 1,8-naphthalimides-containing polymers as plastic scintillators. An attempt for neutronâ€“gamma discrimination. Reactive and Functional Polymers, 2008, 68, 1671-1681.	4.1	22

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19	Iridium(iii) dipyridylamine complexes: synthesis, characterization and catalytic activities in photoredox reactions. Organic Chemistry Frontiers, 2014, 1, 639.	4.5	20
20	A fluorocarbon plastic scintillator for neutron detection: Proof of concept. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 768, 26-31.	1.6	18
21	X-ray detection capability of bismuth-loaded plastic scintillators. Japanese Journal of Applied Physics, 2015, 54, 102202.	1.5	18
22	Mass transport in low Tg azo-polymers: Effect on the surface relief grating induction and stability of additional side chain groups able to generate physical interactions. Applied Surface Science, 2014, 290, 172-179.	6.1	16
23	Unravelling the true MOF-5 luminescence. RSC Advances, 2020, 10, 18418-18422.	3.6	15
24	N-(2â€²,5â€²-di-t-butylphenyl)-4-ethoxy-1,8-naphthalimide: A new fluorophore highly efficient for fast neutrons/gamma-rays discrimination in liquid media. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 602, 425-431.	1.6	14
25	Nanoparticles-loaded plastic scintillators for fast/thermal neutrons/gamma discrimination: Simulation and results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 942, 162370.	1.6	14
26	Gadolinium-loaded Plastic Scintillators for Thermal Neutron Detection using Compensation. IEEE Transactions on Nuclear Science, 2016, 63, 1551-1564.	2.0	12
27	Compensated bismuth-loaded plastic scintillators for neutron detection using low-energy pseudo-spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 25-32.	1.6	12
28	Development of an x-ray imaging system for the Laser Megajoule (LMJ). Review of Scientific Instruments, 2010, 81, 10E509.	1.3	11
29	Iridium complexes inhibit tumor necrosis factor-Î± by utilizing light and mixed ligands. Journal of Organometallic Chemistry, 2016, 808, 122-127.	1.8	11
30	Large solubility of lithium carboxylates reaching high rates of ⁶Li incorporation in polystyrene-based plastic scintillators for fast/thermal neutron and gamma ray detection. Materials Chemistry Frontiers, 2019, 3, 1626-1631.	5.9	11
31	Rigid and flexible azopolymers modified with donor/acceptor groups. Synthesis and photochromic behavior. EXPRESS Polymer Letters, 2011, 5, 959-969.	2.1	11
32	Intrinsic Evaluation of <formula formulatype="inline"> <tex Notation="TeX">$n/gamma $</tex></formula> Discrimination in Plastic Scintillators. IEEE Transactions on Nuclear Science, 2014, 61, 1995-2005.	2.0	9
33	Sensitive and transportable gadolinium-core plastic scintillator sphere for neutron detection and counting. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 828, 181-190.	1.6	9
34	Nâ€(2â€Ethylhexyl)carbazole: A New Fluorophore Highly Suitable as a Monomolecular Liquid Scintillator. Chemistry - A European Journal, 2016, 22, 12074-12080.	3.3	9
35	Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. IEEE Transactions on Nuclear Science, 2020, 67, 679-687.	2.0	9
36	⁶Li₂¹⁰B₄O₇ NPs-loaded plastic scintillators for fast/thermal neutron and gamma ray detection. Materials Chemistry Frontiers, 2019, 3, 1574-1579.	5.9	8

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37	Introductionâ€"Overview on Plastic and Inorganic Scintillators. Topics in Applied Physics, 2021, , 3-33.	0.8	8
38	Trimethyl Bismuth Optical Properties for Particle Detection and the CaLIPSO Detector. IEEE Transactions on Nuclear Science, 2015, 62, 1326-1335.	2.0	7
39	Structural Variation of Carbazole Derivatives for Plastic Scintillation Applications. ChemPhotoChem, 2017, 1, 451-458.	3.0	7
40	The role of the secondary fluorophore in ternary plastic scintillators aiming at discriminating fast neutrons from gamma-rays. Journal of Luminescence, 2019, 213, 67-74.	3.1	7
41	Preparation and characterization of cross-linked plastic scintillators. Polymer, 2021, 213, 123214.	3.8	7
42	From Sintering to Particle Discrimination: New Opportunities in Metalâ€"Organic Frameworks Scintillators. Advanced Photonics Research, 2022, 3, .	3.6	7
43	Preparation and performance of plastic scintillators with copper iodide complex-loaded for radiation detection. Polymer, 2022, 249, 124832.	3.8	7
44	Asymmetric oxidation of sulfenates to sulfinates as a new route to optically active ortho-phosphorylated phenyl sulfoxides. Tetrahedron: Asymmetry, 2005, 16, 3406-3415.	1.8	6
45	Ortho-(methylsulfanyl)phenylphosphonates and derivatives: Synthesis and applications as mono- or bidentate ligands for the preparation of platinum complexes. Journal of Organometallic Chemistry, 2013, 745-746, 206-213.	1.8	6
46	Large irradiation doses can improve the fast neutron/gamma discriminating capability of plastic scintillators. Physical Chemistry Chemical Physics, 2017, 19, 28105-28115.	2.8	6
47	Attempting to prepare a plastic scintillator from a biobased polymer. Journal of Applied Polymer Science, 2020, 137, 48724.	2.6	6
48	Highly Lead-Loaded Red Plastic Scintillators as an X-Ray Imaging System for the Laser MÃ©ga Joule. IEEE Transactions on Nuclear Science, 2012, 59, 1268-1272.	2.0	5
49	From the R&D to the commercialization of a new green-emitting plastic scintillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 955, 163294.	1.6	5
50	Red-emitting liquid and plastic scintillators with nanosecond time response. Journal of Luminescence, 2017, 190, 511-517.	3.1	4
51	A Histogram-Difference Method (HDM) for Neutron/Gamma Discrimination Using Liquid and Plastic Scintillators. IEEE Transactions on Nuclear Science, 2017, , 1-1.	2.0	4
52	New perspectives for undoped CaF2 scintillator as a threshold activation neutron detector. EPJ Web of Conferences, 2018, 170, 07012.	0.3	4
53	Tuning the decay time of plastic scintillators. Dyes and Pigments, 2019, 165, 112-116.	3.7	4
54	New Chiral Ortho-P,S-Difunctionalized Aromatic Compounds. Phosphorus, Sulfur and Silicon and the Related Elements, 2005, 180, 1267-1272.	1.6	3

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55	Study of Intramolecular Competition between Carboxylate and Phosphonate for PtII with the Aid of a Novel Tridentate Carboxylato-Thioether-Phosphonato Ligand. Chemistry - A European Journal, 2007, 13, 5441-5449.	3.3	3
56	Gammastic: Towards a pseudo-gamma spectrometry in plastic scintillators. , 2013, , .		3
57	Nuclear background effects on plasma diagnostics for megajoule class laser facility. , 2013, , .		3
58	Development of a hardened imaging system for the Laser MegaJoule. EPJ Web of Conferences, 2013, 59, 13006.	0.3	3
59	First TDCR measurements at low energies using a miniature x-ray tube. Applied Radiation and Isotopes, 2014, 93, 7-12.	1.5	3
60	The influence of the solvent in fast neutron/gamma discrimination. Europhysics Letters, 2014, 106, 52001.	2.0	3
61	Comparison of prompt and delayed photofission neutron detection ttechniques using different types of radiation detectors. , 2016, , .		3
62	Panâ€‘lanthanides method for plastic doping, application in photophysics, and scintillation with proof of photoelectric event occurrences. Polymers for Advanced Technologies, 2021, 32, 748-754.	3.2	3
63	O453 Mercapto-phosphonate compounds as broad-spectrum inhibitors of the metallo-b -lactamases. International Journal of Antimicrobial Agents, 2007, 29, S95.	2.5	2
64	Vulnerability of optical detection systems to megajoule class laser radiative environment. , 2012, , .		2
65	Study and understanding of n/Î³ discrimination processes in organic plastic scintillators. , 2013, , .		2
66	Compensated gadolinium-loaded plastic scintillators for thermal neutron detection and counting. , 2015, , .		2
67	Plastic scintillators modifications for a selective radiation detection. , 2015, , .		2
68	Development of a portable scintillation spectrometer with alpha-/beta- and neutron-/gamma-pulse-shape discrimination capabilities. , 2018, , .		2
69	Advancements in Gd-based neutron detection: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e663" altimg="si214.gif"><mml:mi>Î³</mml:mi></mml:math>â€“<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e668" altimg="si214.gif"><mml:mi>Î³</mml:mi></mml:math> coincidence approach. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equip	1.6	2
70	Tuning the decay time of liquid scintillators. Journal of Luminescence, 2021, 235, 118021.	3.1	2
71	Progress in Fast and Red Plastic Scintillators. Chemosensors, 2022, 10, 86.	3.6	2
72	Novel ECL Method for the Determination of Skatole in Porcine Adipose Tissue. Analytical Chemistry, 2022, 94, 6403-6409.	6.5	2

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73	Highly lead-loaded red plastic scintillators as an X-ray imaging system for the Laser Méga Joule. , 2011, , .		1
74	Study and understanding of n/γ discrimination in organic plastic scintillators. , 2012, , .		1
75	Ppb detection of Sarin surrogate in liquid solutions. , 2013, , .		1
76	Intrinsic evaluation of n/γ discrimination in organic plastic scintillators. , 2013, , .		1
77	Implementation of gadolinium for neutron measurement systems based on plastic scintillators and semiconductors. , 2016, , .		1
78	Diastereoselective oxidation of menthyl arenesulfenates to sulfinates and access to enantioenriched aryl methyl sulfoxides. Chemical Papers, 2021, 75, 6137-6143.	2.2	1
79	On the Use of Pixelated Plastic Scintillator and Silicon Photomultipliers Array for Coded Aperture Gamma-Neutron Imaging. IEEE Transactions on Nuclear Science, 2022, 69, 731-737.	2.0	1
80	Plastic scintillators with 1-phenyl-3-(mesityl)-2-pyrazoline as unique fluorophore for efficient neutron/gamma pulse shape discrimination. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1030, 166469.	1.6	1
81	Amplification of the luminescence response in organic materials exposed to ionizing radiation. , 2012, , .		0
82	Amplification of the luminescence response in organic materials exposed to ionizing radiation. , 2013, , .		0
83	Distributed feedback lasing of commercial liquid scintillators. Optics Letters, 2013, 38, 5307.	3.3	0
84	Pseudo-gamma Spectrometry in Plastic Scintillators. , 0, , .		0
85	Neutron/gamma discrimination enhancement: plastic scintillators high dose irradiation and recovery time. EPJ Web of Conferences, 2018, 170, 01011.	0.3	0
86	One-pot synthesis and characterization of poly(2-naphthyl methacrylate). Polymer Bulletin, 2021, 78, 2805-2812.	3.3	0
87	Burning TADF solids reveals their excitonsâ€™ mobility. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 432, 114038.	3.9	0